Geophysical journal author index 1987

Abrahamsen, N., Van der Voo, R. Palaeomagnetism of middle Proterozoic (c. 1.25 Ga) dykes from central North Greenland, **91**, 597
Abranches, M.C. *see* Storetvedt, K.M.
Agnew, D.C. *see* Davis, P.M.
Agrawal, P.K. *see* Negi, J.G.
Ahrens, T.J. *see* Svendsen, B.
Aki, K. *see* Leary, P.C.
Aki, K. *see* Li, Y.-G.
Aki, K., *see* Yomogida, K.
Al Abbasi, J.N. see Fahmi, K.J.
Albouy, Y. *see* Baudry, N.
Alinovič, B. *see* Skoko, D.
Allmendinger, R.W. *see* Potter, C.J.
Ambos, E.L. *see* Fuis, G.S.
Anderson, H., Jackson, J. Active tectonics of the Adriatic Region, **91**, 939
Anderson, H., Jackson, J. The deep seismicity of the Tyrrhenian Sea, **91**, 613
Anderson, L.M. *see* McLaughlin, K.L.
Anderson, W.L. *see* Newman, G.A.
Ando, M. *see* Bowman, J.R.
Anson, G.L., Kodama, K.P. Compaction-induced inclination shallowing of the post-depositional remanent magnetization in a synthetic sediment, **88**, 673
Ansorge, J. *see* Mueller, St.
Anufriev, A. About a new method of spectral analysis, **90**, 635
Arnow, J.A. *see* Nelson, K.D.
Artyushkov, E.V. Mechanism of formation of fold belts and associated seismic anisotropy, **91**, 449

Backus, G.E., Le Mouël, J.L. The region on the core-mantle boundary where a geostrophic velocity field can be determined from frozen-flux magnetic data, **88**, 321
Bard, P.Y. *see* Boutin, C.
Barton, P.J. *see* White, R.S.
Baudry, N., Diament, M., Albouy, Y. Precise location of unsurveyed seamounts in the Austral archipelago area using SEASAT data, **89**, 359
Bayliss, A. see White, B.S.
Beamish, D. A simple function for mapping induced currents, **90**, 445
Beamish, D. *see* Evans, R.
Bechtel, T.D., Forsyth, D.W., Swain, C.J., Mechanisms of isostatic compensation in the vicinity of the East African Rift, Kenya, **90**, 455
Becker, M., Groten, E., Lambert, A., Nakai, S. An intercomparison of LaCoste and Romberg Model-D gravimeters: results of the International D-meter Campaign 1983, **89**, 499
Benz, H.M., Smith, R.B. Kinematic source modeling of normal faulting earthquakes using the finite element method, **90**, 305
Berkout, A.J. *see* Unger, R.
Bhattacharya, S.N. Reduction of deep layers in surface wave computation, **88**, 97
Bhuyan, P.K., Tyagi, T.R. Lunar and solar daily variations of equivalent slab thickness at Delhi, **88**, 487
Biju-Duval, B. *see* Bois, C.
BIRPS group *see* Hobbs, R.W.
BIRPS group *see* Klemperer, S.L.
BIRPS group *see* Matthews, D.
Bittner, R. *see* Meissner, R.
Blundell, D.J. *see* Reston, T.J.
Bödvarson, R. *see* Lund, C.-E.
Bois, C., Cazes, M., Him, A., Matte, P., Mascle, A., Montadert, L., Pinet, B. Crustal laminations in deep seismic profiles in France and neighbouring areas, **89**, 297
Bois, C., Damotte, B., Mascle, A., Cazes, M., Him, A., Biju-Duval, B. Operations and main results of the ECORS project in France, **89**, 279
Boiten, R.G. *see* Unger, R.
Bonafede, M., Dragoni, M. A crack model of creep processes on deep-fault sections, **91**, 1061
Bonnet, G. *see* Boutin, C.
Booth, D.C., Crampin, S., Chesnokov, E.M. On the Proceedings of the Second International Workshop on Seismic Anisotropy, **91**, 261
Booth, D.C., *see* Brooks, S.G.
Booth, D.C. *see* Chen, T.-C.
Bording, R.P., Gersztenkorn, A., Lines, L.R., Scales, J.A., Treitel, S. Applications of seismic travel-time tomography, **90**, 285
Boström, A., Karlsson, A. Broad-band synthetic seismograms for a spherical inhomogeneity in a many-layered elastic half-space, **89**, 527
Boteler, D.H., Kaiser, A.B., Ingham, M.R. Direct observation of channelling of induced currents, **88**, 529
Bott, M.H.P. *see* White, R.S.
Boutin, C., Bonnet, G., Bard, P.Y. Green functions and associated sources in infinite and stratified poroelastic media, **90**, 521
Bowen, A.N. *see* White, R.S.
Bowman, J.R., Ando, M. Shear-wave splitting in the upper-mantle wedge above the Tonga subduction zone, **88**, 25
Branch, C. *see* Smithson, S.B.
Brocher, T.M. *see* Fuis, G.S.
Brocher, T.M. *see* Mooney, W.D.
Brooks, S.G., Chroston, P.N., Booth, D.C., Extensive-dilatancy anisotropy (EDA) inferred from observations of crustal shear waves generated by a refraction experiment in northern Scandinavia, **90**, 225
Brown, L., Wille, D, Zheng, L., de Voogd, B., Mayer, J., Hearn, T., Sanford, W., Caruso, C., Zhu, T-F,

Nelson, D., Potter, C., Hauser, E., Klemperer, S., Kaufman, S., Oliver, J. COCORP: new perspectives on the deep crust, **89**, 47
Brown, L.D. *see* Nelson, K.D.
Brown, M.G., Tappert, F.D. Catastrophe theory, caustics traveltime diagrams in seismology, **88**, 217
Brown, R.L. *see* Cook, F.A.
Buck, W.R. Analysis of the cooling of a variable viscosity fluid with applications to the Earth, **89**, 549
Bukina, K.I. *see* Soloviev, S.L.
Burridge, R. *see* White, B.S.
Burton, P.W. *see* MacBeth, C.D.
Butcher, E.C. Currents associated with abnormal quiet days in Sq(H), **88**, 111

Caputo, M. The interpretation of the b and the b_o values and its implications on the regional deformation of the crust, **90**, 551
Caruso, C. *see* Brown, L.
Cazes, M. *see* Bois, C.
Červený, V., Pleinerová, J., Klimeš, L., Pšenčík, I. High-frequency radiation from earthquake sources in laterally varying layered structures, **88**, 43
Chao, B.F., Gross, R.S. Changes in the Earth's rotation and low-degree gravitational field induced by earthquakes, **91**, 569
Chapman, C.H., Kennett, B.L.N. On reducing the reflectivity integral to a finite range, **90**, 741
Chen, T.-C., Booth, D.C., Crampin, S. Shear-wave polarizations near the North Anatolian Fault – III. Observations of temporal changes, **91**, 287
Chen, Y.T., Knopoff, L. Simulation of earthquake sequences, **91**, 693
Chesnokov, E.M. *see*, Booth, D.C.
Chesnokov, E.M. *see* Tsvankin, I.D.
Christensen, U.R. Some geodynamical effects of anisotropic viscosity, **91**, 711
Chroston, P.N. *see* Brooks, S.G.
Clauser, C., Kiesner, S. A conservative, unconditionally stable, second-order three-point differencing scheme for the diffusion–convection equation, **91**, 557
Clayton, R.W. *see* Louie, J.N.
Clowes, R.M., Yorath, C.J., Hyndman, R.D. Reflection mapping across the convergent margin of western Canada, **89**, 79
Clowes, R.M. *see* Green, A.G.
Coflin, K.C. *see* Cook, F.A.
Cogné, J.P. TRM deviations in anisotropic assemblages of multidomain magnetite, **91**, 1015
Collins, C.D.N. *see* Wright, C.
Constable, C.G., Tauxe, L. Palaeointensity in the pelagic realm: marine sediment data compared with archaeomagnetic and lake sediment records, **90**, 43
Cook, F.A., Simony, P.S., Coflin, K.C., Green, A.G., Milkereit, M., Price, R.A., Parrish, R., Patenaude, C., Gordy, P.L., Brown, R.L. Lithoprobe southern Canadian Cordilleran transect: Rocky Mountain thrust belt to Valhalla gneiss complex, **89**, 91
Coruh, C., Costain, J.K., Hatcher, R.D., Pratt, T.L. Jr., Williams, R.T. Phinney, R.A. Results from regional vibroseis profiling: Appalachian Ultra-Deep Core Hole site study, **89**, 147
Coruh, C. *see* Hatcher, R.D. Jr.
Coruh, C. *see* Pratt, T.L.
Costain, J.K. *see* Coruh, C.
Costain, J.K. *see* Hatcher, R.D. Jr.
Costain, J.K. *see* Pratt, T.L.
Crampin, S. The basis for earthquake prediction, **91**, 331
Crampin, S. *see* Booth, D.C.
Crampin, S. *see* Chen, T.–C.
Crampin, S. *see* Evans, R.
Crampin, S. *see* Lovell, J.
Crutchfield II, W.Y. *see* Smka, L.J.

Dahlen, F.A. Multiplet coupling and the calculation of synthetic long-period seismograms, **91**, 241
Dahl-Jensen, T., Dyrelius, D., Juhlin, C., Palm, H., Pedersen, L.B. Deep reflection seismics in the Precambrian of Sweden, **89**, 371
Damotte, B., Fuchs, K., Luschen, E., Wenzel, F., Schlich, R., Toreilles, G. Wide-angle vibroseis test across the Rhine graben, **89**, 313
Damotte, B. *see* Bois, C.
Damotte, B. *see* Hirn, A.
Davey, F.J. Seismic reflection measurements behind the Hikurangi convergent margin, southern North Island, New Zealand, **89**, 443
Davey, F.J. *see* Stern, T.
Davis, J.P. Local eigenfrequency and its uncertainty inferred from fundamental spheroidal mode frequency shifts, **88**, 693
Davis, P.M., Rydelek, P.A., Agnew, D.C., Okamura, A.T. Observation of tidal tilt on Kilauea Volcano, Hawaii, **90**, 233
Dawes, G.J.K. *see* Hutton, V.R.S.
Dawson, E.M. *see* Hargraves, R.B.
Day, G.A. *see* Hillis, R.R.
DEKORP Research Group. Results of deep reflection seismic profiling in the Oberpfalz (Bavaria), **89**, 353
Delaney, P.T. *see* Lee, T.-C.
de Voogd, B., Keen, C.E. Lithoprobe east: results from reflection profiling of the continental margin: Grand Banks Region, **89**, 195
de Voogd, B. *see* Brown, L.
de Voogd, B. *see* Serpa, L.
Dewey, J.f. *see* Mohriak, W.U.
Diament, M. *see* Baudry, N.
Diebold, J.B. *see* Mithal, R.
Dixit, M.M. *see* Kaila, K.L.
Doser, D.I. The Ancash, Peru, earthquake of 1946 November 10: evidence for low-angle normal faulting in the high Andes of northern Peru, **91**, 57
Douglas, A., Marshall, P.D., Young, J.B. The *P* waves from the Amchitka Island explositions, **90**, 101
Dragoni, M. *see* Bonafede, M.
Durrheim, R.J. Seismic reflection and refraction studies of the deep structure of the Agulhas Bank, **89**, 395

Dvoráková, L. *see* Tomek, C.
Dyrelius, D. *see* Dahl-Jensen, T.

ECORS Scientific Party *see* Him, A.
ECORS Scientific Party. *see* Pinet, B.
El-Isa, Z., Mechie, J., Prodehl, C. Shear velocity structure of Jordan from explosion seismic data, **90**, 265
Embleton, B.J.J. *see*, Schmidt, P.W.
Emter, D. *see* Mueller, St.
Evans, M.E. *see* Hedlin, M.A.H.
Evans, R., Beamish, D., Crampin, S., Ücer, S.B., The Turkish Dilatancy Project (TDP3): multidisciplinary studies of a potential earthquake source region, **91**, 265
Evans, R., *see* Lovell, J.

Fahmi, K.J., Al Abbasi, J.N. Mixture distributions – an alternative approach for estimating maximum magnitude earthquake occurrence, **89**, 741
Fainberg, E.B., Singer, B.Sh. The influence of surface inhomogeneities on deep electromagnetic soundings of the Earth, **90**, 61
Faleide, J.I. *see* Gudlaugsson, S.T.
Fanavoll, S. *see* Gudlaugsson, S.T.
Fclsen, L.B. *see* Heyman, E.
Felsen, L.B. *see* Lu, I.T.
Finckh, P. *see* Mueller, St.
Finlayson, D.M. *see* Leven, J.H.
Finlayson, D.M. *see* Wake-Dyster, K.D.
Fisher, M.A. *see* Fuis, G.S.
Forsyth, D.W. *see* Bechtel, T.D.
Fountain, D.M., McDonough, D.T., Goram, J.M. Seismic reflection models of the continental crust based on metamorphic terrains, **89**, 61
Fowler, S.R. *see* White, R.S.
Frazer, L.N. Synthetic seismograms using multifold path integrals – I. Theory, **88**, 621
Frazer, L.N. *see* Fryer, G.J.
Frazer, L.N. *see* Sen, M.K.
Frémont, M.J., Poupinet, G. Temporal variation of body-wave attenuation using earthquake doublets, **90**, 503
Friedlander, S. Internal waves in a rotating stratified spherical shell: asymptotic solutions, **89**, 637
Frost, E.G. *see* Henyey, T.E.
Fryer, G.J., Frazer, L.N. Seismic waves in stratified anisotropic media – II. Elastodynamic eigensolutions for some anisotropic systems, **91**, 73
Fuchs, K. *see* Damotte, B.
Fuis, G. *see* McCarthy, J.
Fuis, G.S., Ambos, E.L., Mooney, W.D., Page, R.A., Fisher, M.A., Brocher, T.M., Taber, J.J. Crustal structure beneath exposed accreted terranes of Southern Alaska, **89**, 73

Gagnepain-Beyneix, J. Evidence of spatial variations of attenuation in the western Pyrenean range, **89**, 681
Gajewski, D., Holbrook, W.S., Prodehl, C. Combined seismic reflection and refraction profiling in southwest Germany – detailed velocity mapping by the refraction survey, **89**, 333
Gajewski, D., Pšenčík, I. Computation of high-frequency seismic wavefields in 3-D laterally inhomogeneous anisotropic media, **91**, 383
Galperin, E.I. *see* Galperina, R.M.
Galperina, R.M., Galperin, E.I. Experimental study of shear-waves from shots in anisotropic media, **91**, 517
Gersztenkorn, A. *see* Bording, R.P.
Gibson, B.S., Levander, A.R. Imaging deep reflectors in the presence of signal-generated noise, **89**, 19
Glenn, L.A., Rial, J.A. Blast wave effects on decoupling with axisymmetric cavities, **91**, 229
Gobarenko, V.S., Nikolova, S.B., Yanovskaya, T.B., 2-D and 3-D velocity patterns in southeastern Europe, Asia Minor and the eastern Mediterranean from seismological data, **90**, 483
Goleby, B.R., Wright, C., Kennett, B.L.N. Preliminary deep reflection studies in the Arunta Block, Central Australia, **89**, 437
Goleby, B.R. *see* Wright, C.
Goram, J.M. *see* Fountain, D.M.
Gorbatsevich, F.F. Physical principles and instruments for the acoustic polarization method of determining elastic anisotropy in rock samples, **91**, 493
Gordon, R.G., Livermore, R.A. Apparent polar wander of the mean-lithosphere reference frame, **91**, 1051
Gordy, P.L. *see* Cook, F.A.
Gough, D.I. *see* Hutton, V.R.S.
Gough, D.I. *see* Ingham, M.R.
Grechka, V.Yu., *see* Obolentseva, I.R.
Green, A. *see* Spencer, C.
Green, A.G., Milkereit, B., Mayrand, L., Spencer, C., Kurtz, R., Clowes, R.M. Lithoprobe seismic reflection profiling across Vancouver Island: results from reprocessing, **89**, 85
Green, A.G. *see* Cook, F.A.
Greenhalgh, S. *see* Wright, C.
Griscom, A. *see* Wentworth, C.M.
Gross, R.S. *see* Chao, B.F.
Groten, E. *see* Becker, M.
Gudlaugsson, S.T. Faleide, J.I., Fanavoll, S., Johansen, B. Deep seismic reflection profiles across the western Barents Sea, **89**, 273
Gudmundsson, A. Formation and mechanics of magma reservoirs in Iceland, **91**, 27
Guéguen, J.-F., Hoang-Trong, P., Legros, H. Seismic rays in an ellipsoidal earth model: theoretical analysis and estimation of deviations due to the ellipticity, **89**, 839
Guttorp, P., Walden, A. On the evaluation of geophysical models, **91**, 201

Haddon, R.A.W. A simple exact method for Green's functions for *SH* motion in a layered elastic medium using leaking modes, **88**, 379
Hagee, V.L. *see* Olson, P.
Hager, P., *see* Ho-Liu, P.

Hajnal, Z., Overton, A. Reflection experiment on a floating ice platform, **89**, 201
Hargraves, R.B., Dawson, E.M., Van Houten, F.B., Palaeomagnetism and mid-Palaeozoic ring complexes in Niger, West Africa, and tectonic implications, **90**, 705
Hatcher, R.D. Jr., Costain, J.K., Coruh, C., Phinney, R.A., Williams, R.T. Tectonic implications of new Appalachian Ultradeep Core Hole (ADCOH) seismic reflection data from the crystalline southern Appalachians, **89**, 157
Hatcher, R.D. Jr. *see* Coruh, C.
Hauser, E. *see* Brown, L.
Hauser, E.C. *see* Potter, C.J.
Hearn, T. *see* Brown, L.
Hedlin, M.A.H., Evans, M.E. A palaeomagnetic study of some Pleistocene sediments in northern Canada and its bearing on the secular variation of the geomagnetic field, **90**, 693
Heikkinen, P. *see* Lund, C.-E.
Henyey, T.E., Okaya, D.A., Frost, E.G., McEvilly, T.V. CALCRUST (1985) seismic reflection survey, Whipple Mountains detachment terrane, California: an overview, **89**, 111
Herrmann, R.B. *see* Saikia, C.K.
Heyman, E., Felsen, L.B. Real and complex spectra – a generalization of WKBJ seismograms, **91**, 1089
Hillis, R.R., Day, G.A. Deep events in U.K. South Western Approaches, **89**, 243
Hinderer, J. *see* Neuberg, J.
Hinnov, L.A., Wilson, C.R. An estimate of the water storage contribution to the excitation of polar motion, **88**, 437
Hirata, T., Satoh, T., Ito, K. Fractal structure of spatial distribution of microfracturing in rock, **90**, 369
Hirn, A., Damotte, B., Torreilles, G., ECORS Scientific Party. Crustal reflection seismics: the contribution of oblique, low frequencey and shear wave illuminations, **89**, 287
Hirn, A. *see* Bois, C.
Ho-Liu, P., Hager, B.H., Raefsky, A. An improved method of Nusselt number calculation, **88**, 205
Hoang-Trong, P. *see* Gueguen, J.-F.
Hobbs, R.W., Peddy, C., BIRPS group. Is lower crustal layering related to extension?, **89**, 239
Hohmann, G.W. *see* Newman, G.A.
Holbrook, W.S. *see* Gajewski, D.
Honda, S., Tanimoto, T. Regional 3-D heterogeneities by waveform inversion – application to the Atlantic area, **91**, 737
Huestis, S.P. Bounds on properties of continental crustal heat productions, **90**, 327
Huestis, S.P. Construction of non-negative resolving kernels in Backus-Gilbert theory, **90**, 495
Hurich, C.A. *see* Smithson, S.B.
Hutchins, D.A. *see*, Young, R.P.
Hutchinson, D.R., Klitgord, K.D., Trehu, A.M. Structure of the lower crust beneath the Gulf of Maine, **89**, 189
Hutton, V.R.S., Gough, D.I., Dawes, G.J.K., Travassos, J. Magnetotelluric soundings in the Canadian Rocky Mountains, **90**, 245
Hwang, H., Mitchell, B.J. Shear velocities, Q_β and the frequency dependence of Q_β in stable and tectonically active regions from surface wave observations, **90**, 575
Hyndman, R.D. *see* Clowes, R.M.

Ibrmajer, I. *see* Tomek, C.
Ingham, M.R., Gough, D.I., Parkinson, W.D. Models of conductive structure under the Canadian Cordillera, **88**, 477
Ingham, M.R. *see* Boteler, D.H.
Irving, E., Yole, R.W. Tectonic rotations and translations in western Canada; new evidence from Jurassic rocks of Vancouver Island, **91**, 1027
Ito, K. *see* Hirata, T.

Jachens, R.C. *see* Wentworth, C.M.
Jackson, J. *see* Anderson, H.
Jackson, J. *see* Westaway, R.
James, D.E. *see* Meyer, R.P.
Jeffreys, H., Shimshoni, M. On regional differences in seismology, **88**, 305
Johansen, B. *see* Gudlaugsson, S.T.
Johnson, L.R. *see* Vasco, D.W.
Johnson, R.A. *see* Smithson, S.B.
Johnstone, D.W. *see* Wake-Dyster, K.D.
Jones, A.G. MT and reflection: an essential combination, **89**, 7
Joppen, M. *see* White, R.S.
Juhlin, C. *see* Dahl-Jensen, T.
Juhlin, C. *see* Lund, C.-E.

Kagan, Y.Y. Point sources of elastic deformation: elementary sources, dynamic displacements, **91**, 891
Kagan, Y.Y. Point sources of elastic deformation: elementary sources, static displacements, **90**, 1
Kagan, Y.Y., Knopoff, L. Random stress and earthquake statistics: time dependence, **88**, 723
Kaila, K.L., Murty, P.R.K., Mall, D.M., Dixit, M.M., Sarkar, D. Deep seismic soundings along Hirapur-Mandla profile, central India, **89**, 399
Kaiser, A.B. *see* Boteler, D.H.
Karlsson, A. *see* Boström, A.
Kaufman, S. *see* Brown, L.
Kaufman, S. *see* Nelson, K.D.
Keen, C.E. *see* de Voogd, B.
Kennett, B.L.N. *see* Chapman, C.H.
Kennett, B.L.N. *see* Goleby, B.R.
Kennett, B.L.N. *see* Maupin, V.
Kennett, B.L.N. *see* Wright, C.
Kiesner, S. *see*, Clauser, C.
Klemperer, S. *see* Brown, L.
Klemperer, S.L., BIRPS group. Reflectivity of the crystalline crust: hypotheses and tests, **89**, 217
Klemperer, S.L. *see* Luetgert, J.H.
Klimes, L., *see* Červený, V.
Klitgord, K.D. *see* Hutchinson, D.R.
Knopoff, L. *see* Chen, Y.T.
Knopoff, L. *see* Kagan, Y.Y.
Knopoff, L. *see* Yamashita, T.
Kodama, K.P. *see* Anson, G.L.

Kohketsu, K. 2-D reflectivity method and synthetic seismograms for irregularly layered structures – I. *SH*-wave generation, **89**, 821
Korák, T. *see* Tomek, C.
Korn, M. Computation of wavefields in vertically inhomogeneous media by a frequency domain finite-difference method and application to wave propagation in earth models with random velocity and density perturbations, **88**, 345
Kovachev, S.A. *see* Soloviev, S.L.
KTB-Research Group Black Forest. Pre-drilling reflection survey of the Black Forest, SW Germany, **89**, 325
Kurtz, R. *see* Green, A.G.

Lambeck, K. *see* Nakada, M.
Lambert, A. *see* Becker, M.
Lanos, P. The effects of demagnetizing fields on thermoremanent magnetization acquired by parallel-sided baked clay blocks, **91**, 987
Larsen, J.C. *see* Schultz, A.
Lay, T. *see* Schwartz, S.Y.
Le Mouël, J.L. *see* Backus, G.E.
Leary, P.C., Li, Y.-G., Aki, K. Observation and modelling of fault-zone fracture seismic anisotropy – I. *P*, *SV* and *SH* travel times, **91**, 461
Leary, P.C. *see* Li, Y.-G.
Lee, H., McMechan, A. Estimation of shear-velocity profiles by imaging of surface waves, **90**, 649
Lee, T.-C., Delaney, P.T. Frictional heating and pore pressure rise due to a fault slip, **88**, 569
Legros, H. *see* Gueguen, J.-F.
Levander, A.R. *see* Gibson, B.S.
Leven, J.H., Finlayson, D.M. Lower crustal involvement in upper crustal thrusting, **89**, 415
Li, Y.-G., Leary, P.C., Aki, K. Observation and modelling of fault-zone fracture seismic anisotropy – II. *P*-wave polarization anomalies, **91**, 485
Li, Y.-G. *see* Leary, P.C.
Liard, J.O. *see* Becker, M.
Lilwall, R.C. Station threshold bias in short-period amplitude distance and station terms used to compute body-wave magnitudes m_b, **91**, 1129
Lindberg, C.R., Park, J. Multiple-taper spectral analysis of terrestrial free oscillations: part II, **91**, 795
Lindberg, C.R. *see* Park, J.
Lines, L.R. *see* Bording, R.P.
Livermore, R.A. *see* Gordon, R.G.
Louie, J.N., Clayton, R.W. The nature of deep crustal structures in the Mojave Desert, California, **89**, 125
Lovell, J., Crampin, S., Evans, R., Ücer, S.B. Microearthquakes in the TDP swarm, Turkey: clustering in space and time, **91**, 313
Lu, I.T., Felsen, L.B., Ruan, Y.Z. Spectral aspects of the Gaussian beam method: reflection from a homogeneous half-space, **89**, 915
Luboshits, V.M. On the connection between the critical value of the "vertical" electrical anisotropy and earthquake prediction, **91**, 349
Luetgert, J. *see* Spencer, C.
Luetgert, J.H., Mann, C.E., Klemperer, S.L. Wide-angle deep crustal reflections in the northern Appalachians, **89**, 183
Lund, C.-E., Heikkinen, P. Reflection measurements along the EGT Polar-profile, northern Baltic Shield, **89**, 361
Lund, C.-E., Roberts, R.G., Juhlin, C., Bödvarson, R., Palm, H. The use of land recorded long-range marine airgun data in crustal reflection-refraction investigations, **89**, 365
Luschen, E. *see* Damotte, B.
Lyakhovitskiy, F.M. Determination of elastic parameters of transversely isotropic media by seismic techniques, **91**, 439
Lyakhovsky, V.A., Myasnikov, V.P. On the relation between seismic wave velocity and stress in a solid, **91**, 429

MacBain, J. On the Frechét differentiability of the one-dimensional electromagnetic induction problem, **88**, 777
MacBeth, C.D., Burton, P.W. Single-station attenuation measurements of high-frequency Rayleigh waves in Scotland, **89**, 757
Maupin, V., Kennett, B.L.N. On the use of truncated modal expansions in laterally varying media, **91**, 837
McBride, J.H. *see* Nelson, K.D.
McCarthy, J., Fuis, G., Wilson, J. Crustal structure of the Whipple Mountains, southeastern California: a refraction study across a region of large continental extension, **89**, 119
McClelland, E. Self-reversal of chemical remanent magnetization: a palaeomagnetic example, **90**, 615
McDonough, D.T. *see* Fountain, D.M.
McEvilly, T.V. *see* Henyey, T.E.
McGeary, S. Non-typical BIRPS on the margin of the northern North Sea: The SHET Survey, **89**, 231
McGeary, S. *see* Warner, M.
McLaughlin, K.L., Anderson, L.M. Stochastic dispersion of short-period *P*-waves due to scattering and multipathing, **89**, 933
McMechan, A. *see* Lee, H.
McMullen Jr., R.J., Mohraz, B. Axisymmetric finite element analysis of an elastic lithosphere subjected to thermal loading, **88**, 325
McNutt, M., Royden, L. Extremal bounds on geotherms in eroding mountain belts from metamorphic pressure-temperature conditions, **88**, 81
Mall, D.M. *see* Kaila, K.L.
Mann, C.E. *see* Luetgert, J.H.
Marshall, P.D. *see* Douglas, A.
Mascle, A. *see* Bois, C.
Matte, P. *see* Bois, C.
Matthews, D., BIRPS group. Some unsolved BIRPS problems, **89**, 209
Matthews, D., Smith, C. Preface with lists of reviewers and acronyms (Special Issue on Deep Seismic Reflection Profiling of the Continental Lithosphere), **89**, vii
Mayer, J. *see* Brown, L.
Mayrand, L. *see* Green, A.G.

Mechie, J. *see* El-Isa, Z.
Meissner, R., Wever, Th., Bittner, R. Results of DEKORP 2-S and other reflection profiles through the Variscides, **89**, 319
Meyer, R.P., James, D.E. Seismic reflection studies using local earthquake sources, **89**, 27
Miles, P.R. *see* Whitmarsh, R.B.
Milkereit, B. *see* Green, A.G.
Milkereit, M. *see* Cook, F.A.
Mitchell, B.J. *see* Hwang, H.
Mitchell, J.G. *see* Storetvedt, K.M.
Mithal, R., Diebold, J.B. A method of obtaining a velocity-depth envelope from wide-angle seismic data, **89**, 965
Mochizuki, E. Ray tracing of body waves in an anisotropic medium, **90**, 627
Mogstad, H. *see* Storetvedt, K.M.
Mohraz, B. *see* McMullen Jr., R.J.
Mohriak, W.U. Dewey, J.F. Deep seismic reflectors in the Campos basin, offshore Brazil, **89**, 133
Molyneux, L. *see* Stephenson, A.
Montadert, L. *see* Bois, C.
Montadert, L. *see* Pinet, B.
Moon, W., Tang, R. Ocean bottom friction coefficient from SEASAT – ALT data (Hudson Bay), **88**, 535
Mooney, W.D. Brocher, T.M. Coincident seismic reflection/refraction studies of the continental lithosphere: a global review, **89**, 1
Mooney, W.D. *see* Fuis, G.S.
Mooney, W.D. *see* Wentworth, C.M.
Morgan, J. *see* White, R.S.
Mueller, St., Ansorge, J., Sierro, N., Finckh, P., Emter, D. Synoptic interpretation of seismic reflection and refraction data, **89**, 345
Muirhead, K.J. *see* Stern, T.
Murty, P.R.K. *see* Kaila, K.L.
Myasnikov, V.P. *see* Lyakhovsky, V.A.

Nakada, M., Lambeck, K. Glacial rebound and relative sea-level variations: a new appraisal, **90**, 171
Nakai, S. *see* Becker, M.
Negi, J.G., Agrawal, P.K., Pandey, O.P. Large variation of Curie depth and lithospheric thickness beneath the Indian subcontinent and a case for magnetothermometry, **88**, 763
Negi, J.G. *see* Pandey, O.P.
Nelson, D. *see* Brown, L.
Nelson, K.D., McBride, J.H., Arnow, J.A., Wille, D.M., Brown, L.D., Oliver, J.E., Kaufman, S. Results of recent COCORP profiling in the southeastern United States, **89**, 141
Neuberg, J., Hinderer, J., Zurn, W. Stacking gravity tide observations in central Europe for the retrieval of the complex eigenfrequency of the nearly diurnal free-wobble, **91**, 853
Newman, G.A., Anderson, W.L., Hohmann, G.W. Interpretation of transient electromagnetic soundings over three-dimensional structures for the central-loop configuration, **89**, 889
Nickolsky, A.A. *see* Obolentseva, I.R.
Nikolova, S.B. *see* Gobarenko, V.S.
Norris, A. *see* White, B.S.
Norton, S.J. Three-dimensional seismic inversion of velocity- and density-dependent reflectivity, **88**, 393

Obolentseva, I.R., Grechka, V.Yu., Nickolsky, A.A., Investigation of 3D wavefields of reflected shear-waves and converted waves: mathematical modelling and reflection data processing, **91**, 543
Okal, E.A. *see* Talandier, J.
Okamura, A.T. *see* Davis, P.M.
Okaya, D.A. *see* Henyey, T.E.
Oliver, J. *see* Brown, L.
Oliver, J.E. *see* Nelson, K.D.
Oliver, J.E. *see* Potter, C.J.
Olson, P., Hagee, V.L. Dynamo waves and palaeomagnetic secular variations, **88**, 139
Overton, A. *see* Hajnal, Z.

Page, R.A. *see* Fuis, G.S.
Pajunpää, K. Conductivity anomalies in the Baltic Shield in Finland, **91**, 657
Palm, H. *see* Dahl-Jensen, T.
Palm, H. *see* Lund, C.-E.
Palmer, H.C. *see* Schmidt, P.W.
Pandey, O.P., Negi, J.G. Global volcanism, biological mass extinctions and the galactic vertical motion of the solar system, **89**, 857
Pandey, O.P. *see* Negi, J.G.
Park, J. Asymptotic coupled-mode expressions for multiplet amplitude anomalies and frequency shifts on an aspherical earth, **90**, 129
Park, J., Lindberg, C.R., Thomson, D.J. Multiple-taper spectral analysis of terrestrial free oscillations: part I, **91**, 755
Park, J. *see* Lindberg, C.R.
Parker, R.L. *see* Stark, P.B.
Parkinson, W.D. *see* Ingham, M.R.
Parrish, R. *see* Cook, F.A.
Parsons, B. *see* Revenaugh, J.
Patenaude, C. *see* Cook, F.A.
Paulssen, H. Lateral heterogeneity of Europe's upper mantle as inferred from modelling of broad-band body waves, **91**, 171
Peddy, C. *see* Hobbs, R.W.
Pedersen, L.B. *see* Dahl-Jensen, T.
Pedersen, L.B. *see* Rasmussen, T.M.
Phillips, J.D. *see* Unger, J.D.
Phinney, R.A. *see* Coruh, C.
Phinney, R.A. *see* Hatcher, R.D.
Phinney, R.A. *see* Roy-Chowdhury, K.
Pinet, B., Montadert, L., ECORS Scientific Party. Deep seismic reflection and refraction profiling along the Aquitaine Shelf (Bay of Biscay), **89**, 305
Pinet, B. *see* Bois, C.
Pleinerová, J. *see* Červený, V.
Potter, C. *see* Brown, L.
Potter, C.J., Allmendinger, R.W., Hauser, E.C., Oliver, J.E. COCORP deep seismic reflection traverses of the U.S. Cordillera, **89**, 99
Poupinet, G. *see* Frémont, M.J.
Powell, C.M.R., Sinha, M.C. The PUMA experiment west of Lewis, U.K., **89**, 259

Prasad, K.A.V.L. see Verma, R.K.
Pratt, T.L., Coruh, C., Costain, J.K. Jr. Lower crustal reflections in central Virginia, USA, **89**, 163
Pratt, T.L. Jr. *see* Coruh, C.
Prelogovič, E. *see* Skoko, D.
Prestcott, C. *see* White, R.S.
Price, R.A. *see* Cook, F.A.
Prodehl, C. *see* El-Isa, Z.
Prodehl, C. *see* Gajewski, D.
Pšenčík, I. *see* Červený, V.
Pšenčík, I. *see* Gajewski, D.

Raefsky, A. *see* Ho-Liu, P.
Rasmussen, T.M., Roberts, R.G., Pedersen, L.B. Magnetotellurics along the Fennoscandian Long Range profile, **89**, 799
Reston, T.J., Blundell, D.J. Possible mid-crustal shears at the edge of the London Platform, **89**, 251
Revenaugh, J., Parsons, B. Dynamic topography and gravity anomalies for fluid layers whose viscosity varies exponentially with depth, **90**, 349
Rial, J.A. *see* Glenn, L.A.
Rijo, L. *see* Wannamaker, P.E.
Ritsema, A.R. *see* Unger, R.
Ritz, M., Vassal, J. A magnetotelluric traverse across the Mauritanides orogenic belt (West Africa), **91**, 43
Roberts, R.G. *see* Lund, C.-E.
Roberts, R.G. *see* Rasmussen, T.M.
Romanowicz, B. Multiplet-multiplet coupling due to lateral heterogeneity: asymptotic effects on the amplitude and frequency of the Earth's normal modes, **90**, 75
Rotstein, Y., Yuval. Z., Trachtman, P. Deep seismic reflection studies in Israel – an update, **89**, 389
Roy-Chowdhury, K., Phinney, R.A. Improved resolution of reflections from the crystalline upper crust, **89**, 35
Royden, L. *see* McNutt, M.
Ruan, Y.Z. *see* Lu, I.T.
Rydelek, P.A. *see* Davis, P.M.

Sacks, P., Symes, W. Recovery of the elastic parameters of a layered half-space, **88**, 593
Saikia, C.K., Herrmann, R.B. Determination of focal mechanism solutions for four earthquakes from Monticello, South Carolina, and crustal structure by waveform modelling, **90**, 669
Sandmeier, K.-J., Wälde, W., Wenzel, F. Physical properties and structure of the lower crust revealed by one- and two-dimensional modelling, **89**, 339
Sanford, W. *see* Brown, L.
Sarkar, D. *see* Kaila, K.L.
Satoh, T. *see* Hirata, T.
Sayers, C.M. Elastic wave anisotropy in the upper mantle, **88**, 417
Scales, J.A. *see* Bording, R.P.
Schlich, R. *see* Damotte, B.
Schmidt, D.Ph *see* Unger, R.
Schmidt, P.W., Embleton, B.J.J., Palmer, H.C., Pre- and post-folding magnetizations from the early Devonian Snowy River Volcanics and Buchan Caves Limestone, Victoria, **91**, 155
Schultz, A., Larsen, J.C. On the electrical conductivity of the mid-mantle – I. Calculation of equivalent scalar magnetotelluric response funtions, **88**, 733
Schwartz, S.Y., Lay, T. Effects of off great-circle propagation on the phase of long-period surface waves, **91**, 143
Sen, M.K., Frazer, L.N. Synthetic seismograms using multifold path integrals – II. Computations, **88**, 647
Serpa, L., de Voogd, B. Deep seismic reflection evidence for the role of extension in the evolution of continental crust, **89**, 55
Serralheiro, A. *see* Storetvedt, K.M.
Sexton, M.J. *see* Wake-Dyster, K.D.
Shimshoni, M. *see* Jeffreys, H.
Sierro, N. *see* Mueller, St.
Silaeva, O.I., Zamakhaev, A.M. Temporal variations of *P*-wave velocity–anisotropy near a tectonic fault, **91**, 535
Simony, P.S. *see* Cook, F.A.
Singer, B.Sh. *see* Fainberg, E.B.
Sinha, M.C. *see* Powell, C.M.R.
Skoko, D., Prelogovič, E., Alinovič, B. Geological structure of the Earth's crust above the Moho discontinuity in Yugoslavia, **89**, 379
Sleep, N.H. Lithospheric heating by mantle plumes, **91**, 1
Sleep, N.H. An analytic model for a mantle plume fed by a boundary layer, **90**, 119
Smith, C. *see* Matthews, D.
Smith, E.G.C. *see* Stem, T.
Smith, R.B. *see* Benz, H.M.
Smithson, S.B., Johnson, R.A., Hurich, C.A., Valasek, P.A., Branch, C. Deep crustal structure and genesis from contrasting reflection patterns: an integrated approach, **89**, 67
Soler, T., van Gelder, B.H.W. On differential scale changes and the satellite Doppler system z- shift, **91**, 639
Soloviev, S.L., Bukina, K.I., Kovachev, S.A., Villemson, L.Kh. Long-range propagation of short-period transversal and longitudinal seismic waves in the Baikal zone, **88**, 125
Spence, G.D. *see* White, R.S.
Spencer, C., Green, A., Luetgert, J. More seismic evidence on the location of Grenville basement beneath the Appalachians of Quebec–Maine), **89**, 177
Spencer, C. *see* Green, A.G.
Smka, L.J., Crutchfield II, W.Y. Riccati inversion of magnetotelluric data, **91**, 211
Stark, P.B. Rigorous velocity bounds from soft $\tau(p)$ and $X(p)$ data) **89**, 987
Stark, P.B., Parker, R.L. Smooth profiles from $\tau(p)$ and $X(p)$ data), **89**, 997
Stening, R.J., Winch, D.E. The lunar geomagnetic tide at night, **88**, 461
Stephenson, A., Molyneux, L. The rapid determination of rotational remanent magnetization and the effective field which produces it, **90**, 477

Stern, T., Smith, E.G.C., Davey, F.J., Muirhead, K.J. Crustal and upper mantle structure of the northwestern North Island, New Zealand from seismic refraction data, **91**, 915
Stevenson, D.J. Limits on lateral density and velocity variations in the Earth's outer core, **88**, 311
Stewart, D.B. *see* Unger, J.D.
Stodt, J.A. *see* Wannamaker, P.E.
Storetvedt, K.M., Mogstad, H., Abranches, M.C., Mitchell, J.G., Serralheiro, A. Palaeomagnetism and isotopic data from Upper Cretaceous igneous rocks of W. Portugal; geological correlation and plate tectonic aspects, **88**, 241
Sugiharto, S. *see* Wright, C.
Svendsen, B., Ahrens, T.J. Shock-induced temperatures of MgO, **91**, 667
Swain, C.J. *see* Bechtel, T.D.
Symes, W. *see* Sacks, P.

Taber, J.J. *see* Fuis, G.S.
Talandier, J., Okal, E.A. Crustal structure in the Society and Tuamotu Islands, French Polynesia, **88**, 499
Tang, R. *see* Moon, W.
Tanimoto, T. Surface-wave tracing equations and Fermat's principle in an anisotropic earth, **88**, 231
Tanimoto, T. The three-dimensional shear wave structure in the mantle by overtone waveform inversion – I. Radial seismogram inversion, **89**, 713
Tanimoto, T. *see* Honda, S.
Tappert, F.D. *see* Brown, M.G.
Tauxe, L. *see* Constable, C.G.
Taylor, D.B. Double Contour Integration for Transmissions from Point Sources through Anisotropic Layers as used in ROCPAC software, **91**, 373
Teng, J.-W. Explosion study of the structure and seismic velocity distribution of the crust and upper mantle under the Xizang (Tibet) Plateau, **89**, 405
Tessier, J. *see* Tucholka, P.
Thomson, D.J. *see* Park, J.
Thouveny, N. Variations of the relative palaeointensity of the geomagnetic field in western Europe in the interval 25–10 kyr BP as deduced from analyses of lake sediments, **91**, 123
Tomek, C., Dvoráková, L., Ibrmajer, I., Yiricek, R., Korább, T. Crustal profiles of active continental collisional belt: Czechoslovak deep seismic reflection profiling in the West Carpathians, **89**, 383
Toreilles, G. *see* Damotte, B.
Torreilles, G. *see* Him, A.
Trachtman, P. *see* Rotstein, Y.
Travassos, J. *see* Hutton, V.R.S.
Trehu, A.M. *see* Hutchinson, D.R.
Treitel, S. *see* Bording, R.P.
Tsvankin, I.D., Chesnokov, E.M. Plane wave propagation in nonlinear–elastic anisotropic media, **91**, 413
Tucholka, P., Tessier, J. Interfacing the DIGICO flux-gate spinner magnetometer to an APPLE IIe microcomputer, **89**, 705
Turner, G.M. A 5000 year geomagnetic palaeosecular variation record from western Canada, **91**, 103
Tyagi, T.R. *see* Bhuyan, P.K.

Ücer, S.B. *see* Evans, R.
Ücer, S.B. *see* Lovell, J.
Unger, J.D., Stewart, D.B., Phillips, J.D. Interpretation of migrated seismic reflection profiles across the northern Appalachians in Maine, **89**, 171
Unger, R., van Kampen, W.A., Berkhout, A.J., Boiten, R.G., Ziolkowski, A.M., Ritsema, A.R., Schmidt, D.Ph. New possibilities in controlled-source seismology with a magnetic levitation vibrator, **89**, 41

Valasek, P.A. *see* Smithson, S.B.
van der Hijden, J.H.M.T. Radiation from an impulsive line source in an unbounded homogeneous anisotropic medium, **91**, 355
Van der Voo, R. *see* Abrahamsen, N.
van Gelder, B.H.W. *see* Soler, T.
van Kampen, W.A. *see* Unger, R.
Vasco, D.W., Johnson, L.R. The correspondence between gravitational attraction and surface displacement due to volume expansion, **89**, 749
Van Houten, F.B. *see* Dawson, E.M.
Vassal, *see* Ritz, M.
Verma, R.K., Prasad, K.A.V.L. Analysis of gravity fields in the north-western Himalayas and Kohistan region using deep seismic sounding data, **91**, 869
Villemson, L.Kh. *see* Soloviev, S.L.

Wahr, J.M. The Earth's C_{21} and S_{21} gravity coefficients and the rotation of the core, **88**, 265
Wake-Dyster, K.D., Sexton, M.J., Johnstone, D.W., Wright, C., Finlayson, D.M. A deep seismic profile of 800 km length recorded in southern Queensland, Australia, **89**, 423
Wälde, W. *see* Sandmeier, K.-J.
Walden, A. *see* Guttorp, P.
Walker, G.P.L. *see* Wilson, L.
Wannamaker, P.E., Stodt, J.A., Rijo, L. A stable finite element solution for two-dimensional magnetotelluric modelling, **88**, 277
Warner, M. Migration – why doesn't it work for deep continental data?, **89**, 21
Warner, M., McGeary, S. Seismic reflection coefficients from mantle fault zones, **89**, 223
Warner, M.R. Seismic reflections from the Moho – the effect of isostasy, **88**, 425
Wentworth, C.M., Zoback, M.D., Griscom, A., Jachens, R.C., Mooney, W.D. A transect across the Mesozoic accretionary margin of central California, **89**, 105
Wenzel, F. *see* Damotte, B.
Wenzel, F. *see* Sandmeier, K.-J.
Westbrook, K. *see* White, R.S.
Westaway, R. The Campania, southern Italy, earthquakes of 1962 August 21, **88**, 1

Westaway, R., Jackson, J. The earthquake of 1980 November 23 in Campania-Basilicata (southern Italy), **90**, 375
Wever, Th. *see* Meissner, R.
White, B.S., Norris, A., Bayliss, A., Burridge, R. Some remarks on the Gaussian beam summation method, **89**, 579
White, R.S., Westbrook, K., Fowler, S.R., Spence, G.D., Barton, P.J., Joppen, M., Morgan, J., Bowen, A.N., Prestcott, C., Bott, M.H.P. Hatton Bank (northwest U.K.) continental margin structure, **89**, 265
Whitmarsh, R.B., Miles, P.R. Seismic structure of a seaward-dipping reflector sequence southwest of Rockall Plateau, **90**, 731
Wille, D. *see* Brown, L.
Wille, D.M. *see* Nelson, K.D.
Williams, R.T. *see* Coruh, C.
Williams, R.T. *see* Hatcher, R.D.
Willis, D.M., Young, L.R. Equation for the field lines of an axisymmetric magnetic multipole, **89**, 1011
Wilson, C.R. *see* Hinnov, L.A.
Wilson, J. *see* McCarthy, J.
Wilson, L., Walker, G.P.L. Explosive volcanic eruptions – VI. Ejecta dispersal in plinian eruptions: the control of eruption conditions and atmospheric properties, **89**, 657
Winch, D.E *see* Stening, R.J.
Wright, C. *see* Goleby, B.R.
Wright, C. *see* Wake-Dyster, K.D.
Wright, C., Goleby, B.R., Collins, C.D.N., Kennett, B.L.N., Sugiharto, S., Greenhalgh, S. The Central Australian seismic experiment, 1985: preliminary results, **89**, 431

Yamashita, T., Knopoff, L. Models of aftershock occurrence, **91**, 13
Yanovskaya, T.B. see Gobarenko, V.S.
Yiřiček, R. *see* Tomek, C.
Yole, R.W. *see* Irving, E.
Yomogida, K. Gaussian beams for surface waves in transversely isotropic media, **88**, 297
Yomogida, K., Aki, K. Amplitude and phase data inversions for phase velocity anomalies in the Pacific Ocean basin, **88**, 161
Yorath, C.J. *see* Clowes, R.M.
Young, J.B. *see* Douglas, A.
Young, L.R. *see* Willis, D.M.
Young, R.P., Hutchins, D.A. Measuring anisotropy in rocks using laser-generated ultrasound, **91**, 501
Yuval, Z. *see* Rotstein, Y.

Zamakhaev, A.M. *see* Silaeva, O.I.
Zheng, L. *see* Brown, L.
Zhu, T.-F. *see* Brown, L.
Ziolkowski, A.M. *see* Unger, R.
Zoback, M.D. *see* Wentworth, C.M.
Zürn, W. *see* Neuberg, J.

Geopl

Aftersh

Models of
Knopof

Analys

About a r
90, 635

Anisotr

Seismic v
Elastoc
anisotr
L.N.), 9
Some geo
(Christ
TRM dev
multid
1015

APW

Apparent
referen
91, 10

Archae

The effe
magne
clay b

ARM

Variation
geoma
interva
of lak

Atlanti

Regional
applic
Tanim

Attenu

Shear ve

Geophysical journal subject index 1987

Aftershocks

Models of aftershock occurrence (Yamashita, T., Knopoff, L.), **91**, 13

Analysis

About a new method of spectral analysis (Anufriev, A.), **90**, 635

Anisotropy

Seismic waves in stratified anisotropic media – II Elastodynamic eigensolutions for some anisotropic systems (Fryer, G.J., Frazer, L.N.), **91**, 73

Some geodynamical effects of anisotropic viscosity, (Christensen, U.R.), **91**, 711

TRM deviations in anisotropic assemblages of multidomain magnetite (Cogné, J.P.), **91**, 1015

APW

Apparent polar wander of the mean-lithosphere reference frame (Gordon, R.G., Livermore, R.A.), **91**, 1051

Archaeomagnetism

The effects of demagnetizing fields on thermoremanent magnetization acquired by parallel-sided baked clay blocks (Lanos, P.), **91**, 987

ARM

Variations of the relative palaeointensity of the geomagnetic field in western Europe in the interval 25–10 kyr BP as deduced from analyses of lake sediments (Thouveny, N.), **91**, 123

Atlantic Ocean

Regional 3-D heterogeneities by waveform inversion – application to the Atlantic area (Honda, S., Tanimoto, T.), **91**, 737

Attenuation

Shear velocities, Q_β, and the frequency dependence of Q_β in stable and tectonically active regions from surface wave observations (Hwang, H., Mitchell, B.J.), **90**, 575

Australasia

Pre- and post-folding magnetizations from the early Devonian Snowy River Volcanics and Buchan Caves Limestone, Victoria (Schmidt, P.W., Embleton, B.J.J., Palmer, H.C.), **91**, 155

Crustal and upper mantle structure of the northwestern North Island, New Zealand from seismic refraction data (Stern, T., Smith, E.G.C., Davey, F.J., Muirhead, K.J.), **91**, 915

Austrian Alps

Extremal bounds on geotherms in eroding mountain belts from metamorphic pressure-temperature conditions (McNutt, M., Royden, L.), **88**, 81

Baikal rift zone

Long-range propagation of short-period transversal and longitudinal seismic waves in the Baikal zone (Soloviev, S.L., Bukina, K.I., Kovachev, S.A., Villemson, L.Kh.), **88**, 125

Blast wave effects

Blast wave effects on decoupling with axisymmetric cavities (Glenn, L.A., Rial, J.A.), **91**, 229

Body waves

Temporal variation of body-wave attenuation using earthquake doublets (Frémont, M.J., Poupinet, G.), **90**, 503

Ray tracing of body waves in an anisotropic medium, (Mochizuki, E.), **90**, 627

Observation and modelling of fault-zone fracture seismic anisotropy – I. *P*, *SV* and *SH* travel times (Leary, P.C., Li, Y.-G., Aki, K.), **91**, 461

Observation and modelling of fault-zone fracture seismic anisotropy – II. *P*-wave polarization anomalies (Li, Y.-G., Leary, P.C., Aki, K.), **91**, 485

Temporal variations of *P*-wave velocity–anisotropy near a tectonic fault (Silaeva, O.I., Zamakhaev, A.M.), **91**, 535

Investigation of 3D wavefields of reflected shear-waves and converted waves: mathematical modelling and reflection data processing

(Obolentseva, I.R., Grechka, V.Yu., Nickolsky, A.A.), **91**, 543

Canada

Models of conductive structure under the Canadian Cordillera (Ingham, M.R., Gough, D.I., Parkinson, W.D.), **88**, 477
Ocean bottom friction coefficient from SEASAT – ALT data (Hudson Bay) (Moon, W., Tang, R.), **88**, 535
Magnetotelluric soundings in the Canadian Rocky Mountains (Hutton, V.R.S., Gough, D.I., Dawes, G.J.K., Travassos, J.), **90**, 245
A palaeomagnetic study of some Pleistocene sediments in northern Canada and its bearing on the secular variation of the geomagnetic field, (Hedlin, M.A.H., Evans, M.E.), **90**, 693
A 5000 year geomagnetic palaeosecular variation record from western Canada (Turner, G.M.), **91**, 103
Tectonic rotations and translations in western Canada; new evidence from Jurassic rocks of Vancouver Island (Irving, E., Yole, R.W.), **91**, 1027

Chandler wobble

An estimate of the water storage contribution to the excitation of polar motion (Hinnov, L.A., Wilson, C.R.), **88**, 437

Computational methods

On the evaluation of geophysical models (Guttorp, P., Walden, A.), **91**, 201
Riccati inversion of magnetotelluric data (Srnka, L.J., Crutchfield II, W.Y.), **91**, 211
A conservative, unconditionally stable, second-order three-point differencing scheme for the diffusion–convection equation (Clauser, C., Kiesner, S.), **91**, 557
Simulation of earthquake sequences (Chen, Y.T., Knopoff, L.), **91**, 693
On the use of truncated modal expansions in laterally varying media (Maupin, V., Kennett, B.L.N.), **91**, 837
Station threshold bias in short-period amplitude distance and station terms used to compute body-wave magnitudes m_b (Lilwall, R.C.), **91**, 1129

Conductivity

Conductivity anomalies in the Baltic Shield in Finland (Pajunpää, K.), **91**, 657

Continental deformation

Tectonic rotations and translations in western Canada; new evidence from Jurassic rocks of Vancouver Island (Irving, E., Yole, R.W.), **91**, 1027

Continental lithosphere – America

COCORP: new perspectives on the deep crust (Brown, L., Wille, D., Zheng, L., de Voogd, B., Mayer, J., Hearn, T., Sanford, W., Caruso, C., Zhu, T.-F., Nelson, D., Potter, C., Hauser, E., Klemperer, S., Kaufman, S., Oliver, J.), **89**, 47
Deep seismic reflection evidence for the role of extension in the evolution of continental crust (Serpa, L., de Voogd, B.), **89**, 55
Seismic reflection models of the continental crust based on metamorphic terrains (Fountain, D.M., McDonough, D.T., Goram, J.M.), **89**, 61
Deep crustal structure and genesis from contrasting reflection patterns: an integrated approach (Smithson, S.B., Johnson, R.A., Hurich, C.A., Valasek, P.A., Branch, C.), **89**, 67
Crustal structure beneath exposed accreted terranes of Southern Alaska (Fuis, G.S., Ambos, E.L., Mooney, W.D., Page, R.A., Fisher, M.A., Brocher, T.M., Taber, J.J.), **89**, 73
Reflection mapping across the convergent margin of western Canada (Clowes, R.M., Yorath, C.J., Hyndman, R.D.), **89**, 79
Lithoprobe seismic reflection profiling across Vancouver Island: results from reprocessing (Green, A.G., Milkereit, B., Mayrand, L., Spencer, C., Kurtz, R., Clowes, R.M.), **89**, 85
Lithoprobe southern Canadian Cordilleran transect: Rocky Mountain thrust belt to Valhalla gneiss complex (Cook, F.A., Simony, P.S., Coflin, K.C., Green, A.G., Milkereit, M., Price, R.A., Parrish, R., Patenaude, C., Gordy, P.L., Brown, R.L.), **89**, 91
COCORP deep seismic reflection traverses of the U.S. Cordillera (Potter, C.J., Allmendinger, R.W., Hauser, E.C., Oliver, J.E.), **89**, 99
A transect across the Mesozoic accretionary margin of central California (Wentworth, C.M., Zoback, M.D., Griscom, A., Jachens, R.C., Mooney, W.D.), **89**, 105
CALCRUST (1985) seismic reflection survey, Whipple Mountains detachment terrane, California: an overview (Henyey, T.E., Okaya, D.A., Frost, E.G., McEvilly, T.V.), **89**, 111
Crustal structure of the Whipple Mountains, southeastern California: a refraction study across a region of large continental extension (McCarthy, J., Fuis, G., Wilson, J.), **89**, 119
The nature of deep crustal structures in the Mojave Desert, California (Louie, J.N., Clayton, R.W.), **89**, 125
Deep seismic reflectors in the Campos basin, offshore Brazil (Mohriak, W.U. Dewey, J.F.), **89**, 133
Results of recent COCORP profiling in the southeastern United States (Nelson, K.D., McBride, J.H., Arnow, J.A., Wille, D.M., Brown, L.D., Oliver, J.E., Kaufman, S.), **89**, 141
Results from regional vibroseis profiling: Appalachian Ultra-Deep Core Hole site study (Coruh, C., Costain, J.K., Hatcher, R.D. Jr, Pratt, T.L., Williams, R.T. Phinney, R.A.), **89**, 147
Tectonic implications of new Appalachian Ultradeep

Core Hole (ADCOH) seismic reflection data from the crystalline southern Appalachians (Hatcher, R.D. Jr., Costain, J.K., Corugh, C., Phinney, R.A., Williams, R.T.), **89**, 157
Lower crustal reflections in central Virginia, USA (Pratt, T.L., Coruh, C., Costain, J.K.), **89**, 163
Interpretation of migrated seismic reflection profiles across the northern Appalachians in Maine (Unger, J.D., Stewart, D.B., Phillips, J.D.), **89**, 171
More seismic evidence on the location of Grenville basement beneath the Appalachians of Québec–Maine (Spencer, C., Green, A., Luetgert, J.), **89**, 177
Wide-angle deep crustal reflections in the northern Appalachians (Luetgert, J.H., Mann, C.E., Klemperer, S.L.), **89**, 183
Structure of the lower crust beneath the Gulf of Maine (Hutchinson, D.R., Klitgord, K.D., Trehu, A.M.), **89**, 189
Lithoprobe east: results from reflection profiling of the continental margin: Grand Banks Region (de Voogd, B., Keen, C.E.), **89**, 195
Reflection experiment on a floating ice platform (Hajnal, Z., Overton, A.), **89**, 201
Lithospheric heating by mantle plumes (Sleep, N.H.), **91**, 1

Continental lithosphere – Europe

Some unsolved BIRPS problems (Matthews, D., BIRPS group), **89**, 209
Reflectivity of the crystalline crust: hypotheses and tests (Klemperer, S.L., BIRPS group), **89**, 217
Seismic reflection coefficients from mantle fault zones (Warner, M., McGeary, S.), **89**, 223
Non-typical BIRPS on the margin of the northern North Sea: The SHET Survey (McGeary, S.), **89**, 231
Is lower crustal layering related to extension? (Hobbs, R.W., Peddy, C., BIRPS group), **89**, 239
Deep events in U.K. South Western Approaches (Hillis, R.R., Day, G.A.), **89**, 243
Possible mid-crustal shears at the edge of the London Platform (Reston, T.J., Blundell, D.J.), **89**, 251
The PUMA experiment west of Lewis, U.K. (Powell, C.M.R., Sinha, M.C.), **89**, 259
Hatton Bank (northwest U.K.) continental margin structure (White, R.S., Westbrook, K., Fowler, S.R., Spence, G.D., Barton, P.J., Joppen, M., Morgan, J., Bowen, A.N., Prestcott, C., Bott, M.H.P.), **89**, 265
Deep seismic reflection profiles across the western Barents Sea (Gudlaugsson, S.T. Faleide, J.I., Fanavoll, S., Johansen, B.), **89**, 273
Operations and main results of the ECORS project in France (Bois, C., Damotte, B., Mascle, A., Cazes, M., Him, A., Biju-Duval, B.), **89**, 279
Crustal reflection seismics: the contribution of oblique, low frequencey and shear wave illuminations (Him, A., Damotte, B., Torreilles, G., ECORS Scientific Party), **89**, 287
Crustal laminations in deep seismic profiles in France and neighbouring areas (Bois, C., Cazes, M., Him, A., Matte, P., Mascle, A., Montadert, L., Pinet, B.), **89**, 297
Deep seismic reflection and refraction profiling along the Aquitaine Shelf (Bay of Biscay) (Pinet, B., Montadert, L., ECORS Scientific Party), **89**, 305
Wide-angle vibroseis test across the Rhine graben (Damotte, B., Fuchs, K., Lüschen, E., Wenzel, F., Schlich, R., Torreilles, G.), **89**, 313
Results of DEKORP 2-S and other reflection profiles through the Variscides (Meissner, R., Wever, Th., Bittner, R.), **89**, 319
Pre-drilling reflection survey of the Black Forest, SW Germany (KTB-Research Group Black Forest), **89**, 325
Combined seismic reflection and refraction profiling in southwest Germany – detailed velocity mapping by the refraction survey (Gajewski, D., Holbrook, W.S., Prodehl, C.), **89**, 333
Physical properties and structure of the lower crust revealed by one– and two-dimensional modelling (Sandmeier, K.-J., Wälde, W., Wenzel, F.), **89**, 339
Synoptic interpretation of seismic reflection and refraction data (Mueller, St., Ansorge, J., Sierro, N., Finckh, P., Emter, D.), **89**, 345
Results of deep reflection seismic profiling in the Oberpfalz (Bavaria) (DEKORP Research Group), **89**, 353
Reflection measurements along the EGT Polar-profile, northern Baltic Shield (Lund, C.-E., Heikkinen, P.), **89**, 361
The use of land recorded long-range marine airgun data in crustal reflection-refraction investigations (Lund, C.-E., Roberts, R.G., Juhlin, C., Bödvarson, R., Palm, H.), **89**, 365
Deep reflection seismics in the Precambrian of Sweden (Dahl-Jensen, T., Dyrelius, D., Juhlin, C., Palm, H., Pedersen, L.B.), **89**, 371
Geological structure of the Earth's crust above the Moho discontinuity in Yugoslavia (Skoko, D., Prelogovic, E., Alinovic, B.), **89**, 379
Crustal profiles of active continental collisional belt: Czechoslovak deep seismic reflection profiling in the West Carpathians (Tomek, C., Dvoráková, L., Ibrmajer, I., Yirícek, R., Koráb, T.), **89**, 383
Deep seismic reflection studies in Israel – an update (Rotstein, Y., Yuval, Z., Trachtman, P.), **89**, 389

Continental lithosphere – General

Coincident seismic reflection/refraction studies of the continental lithosphere: a global review (Mooney, W.D. Brocher, T.M.), **89**, 1
MT and reflection: an essential combination (Jones, A.G.), **89**, 7
Imaging deep reflectors in the presence of signal-generated noise (Gibson, B.S., Levander, A.R.), **89**, 19
Migration – why doesn't it work for deep continental data? (Warner, M.), **89**, 21

Seismic reflection studies using local earthquake sources (Meyer, R.P., James, D.E.), **89**, 27
Improved resolution of reflections from the crystalline upper crust (Roy-Chowdhury, K., Phinney, R.A.), **89**, 35
New possibilities in controlled-source seismology with a magnetic levitation vibrator (Unger, R., van Kampen, W.A., Berkhout, A.J., Boiten, R.G., Ziolkowski, A.M., Ritsema, A.R., Schmidt, D.Ph.), **89**, 41
Preface with lists of reviewers and acronyms (Special Issue on Deep Seismic Reflection Profiling of the Continental Lithosphere) (Matthews, D., Smith, C.), **89**, vii

Continental lithosphere–Asia and Australasia

Seismic reflection and refraction studies of the deep structure of the Agulhas Bank (Durrheim, R.J.), **89**, 395
Deep seismic soundings along Hirapur-Mandla profile, central India (Kaila, K.L., Murty, P.R.K., Mall, D.M., Dixit, M.M., Sarkar, D.), **89**, 399
Explosion study of the structure and seismic velocity distribution of the crust and upper mantle under the Xizang (Tibet)Plateau (Teng, J.-W.), **89**, 405
Lower crustal involvement in upper crustal thrusting (Leven, J.H., Finlayson, D.M.), **89**, 415
A deep seismic profile of 800 km length recorded in southern Queensland, Australia (Wake-Dyster, K.D., Sexton, M.J., Johnstone, D.W., Wright, C., Finlayson, D.M.), **89**, 423
The Central Australian seismic experiment, 1985: preliminary results (Wright, C., Goleby, B.R., Collins, C.D.N., Kennett, B.L.N., Sugiharto, S., Greenhalgh, S.), **89**, 431
Preliminary deep reflection studies in the Arunta Block, Central Australia (Goleby, B.R., Wright, C., Kennett, B.L.N.), **89**, 437
Seismic reflection measurements behind the Hikurangi convergent margin, southern North Island, New Zealand (Davey, F.J.), **89**, 443

Coordinate transformation

On differential scale changes and the satellite Doppler system z-shift (, Soler, T., van Gelder, B.H.W.), **91**, 639

Core-mantle boundary

The region on the core–mantle boundary where a geostrophic velocity field can be determined from frozen-flux magnetic data (Backus, G.E., Le Mouël, J.L.), **88**, 321
Stacking gravity tide observations in central Europe for the retrieval of the complex eigenfrequency of the nearly diurnal free-wobble (Neuberg, J., Hinderer, J., Zürn, W.), **91**, 853

Crustal deformation

The interpretation of the b and the b_0 values and its implications on the regional deformation of the crust (Caputo, M.), **90**, 551

Crustal structure

Conductivity anomalies in the Baltic Shield in Finland (Pajunpää, K.), **91**, 657
Crustal and upper mantle structure of the northwestern North Island, New Zealand from seismic refraction data (Stern, T., Smith, E.G.C., Davey, F.J., Muirhead, K.J.), **91**, 915

Decoupling

Blast wave effects on decoupling with axisymmetric cavities (Glenn, L.A., Rial, J.A.), **91**, 229

Diffusion–convection

A conservative, unconditionally stable, second-order three-point differencing scheme for the diffusion–convection equation (Clauser, C., Kiesner, S.), **91**, 557
Some geodynamical effects of anisotropic viscosity (Christensen, U.R.), **91**, 711

Diurnal tides

Stacking gravity tide observations in central Europe for the retrieval of the complex eigenfrequency of free-wobble (Neuberg, J., Hinderer, J., Zürn, W.), **91**, 853

Earth models

Computation of wavefields in vertically inhomogeneous media by a frequency domain finite-difference method and application to wave propagation in earth models with random velocity and density perturbations (Korn, M.), **88**, 345
Seismic rays in an ellipsoidal earth model: theoretical analysis and estimation of deviations due to the ellipticity (Gueguen, J.-F., Hoang-Trong, P., Legros, H.), **89**, 839

Earth tides

Observation of tidal tilt on Kilauea Volcano, Hawaii, (Davis, P.M., Rydelek, P.A., Agnew, D.C., Okamura, A.T.), **90**, 233

Earthquake seismology

Evidence of spatial variations of attenuation in the western Pyrenean range (Gagnepain-Beyneix, J.), **89**, 681
Mixture distributions – an alternative approach for estimating maximum magnitude earthquake occurrence (Fahmi, K.J., Al Abbasi, J.N.), **89**, 741

Earthquake source mechanism

Point sources of elastic deformation: elementary sources, static displacements (Kagan, Y.Y.), **90**, 1
The *P* waves from the Amchitka Island explosions (Douglas, A., Marshall, P.D., Young, J.B.), **90**, 101

Earthquakes

The Campania, southern Italy, earthquakes of 1962 August 21 (Westaway, R.), **88**, 1
High-frequency radiation from earthquake sources in laterally varying layered structures (Červený, V., Pleinerová, J., Klimeš, L., Pšenčík, I.), **88**, 43
Long-range propagation of short-period transversal and longitudinal seismic waves in the Baikal zone (Soloviev, S.L., Bukina, K.I., Kovachev, S.A., Villemson, L.Kh.), **88**, 125
Frictional heating and pore pressure rise due to a fault slip (Lee, T.-C., Delaney, P.T.), **88**, 569
Random stress and earthquake statistics: time dependence (Kagan, Y.Y., Knopoff, L.), **88**, 723
The earthquake of 1980 November 23 in Campania-Basilicata (southern Italy) (Westaway, R., Jackson, J.), **90**, 375
Temporal variation of body-wave attenuation using earthquake doublets (Frémont, M.J., Poupinet, G.), **90**, 503
The interpretation of the *b* and the b_o values and its implications on the regional deformation of the crust (Caputo, M.), **90**, 551
Determination of focal mechanism solutions for four earthquakes from Monticello, South Carolina, and crustal structure by waveform modelling (Saikia, C.K., Herrmann, R.B.), **90**, 669
Models of aftershock occurrence (Yamashita, T., Knopoff, L.), **91**, 13
The Ancash, Peru, earthquake of 1946 November 10: evidence for low-angle normal faulting in the high Andes of northern Peru (Doser, D.I.), **91**, 57
The Turkish Dilatancy Project (TDP3): multidisciplinary studies of a potential earthquake source region (Evans, R., Beamish, D., Crampin, S., Ücer, S.B.), **91**, 265
Microearthquakes in the TDP swarm, Turkey: clustering in space and time (Lovell, J., Crampin, S., Evans, R., Ucer, S.B.), **91**, 313
The basis for earthquake prediction (Crampin, S.), **91**, 331
On the connection between the critical value of the "vertical" electrical anisotropy and earthquake prediction (Luboshits, V.M.), **91**, 349
Changes in the Earth's rotation and low-degree gravitational field induced by earthquakes (Chao, B.F., Gross, R.S.), **91**, 569
The deep seismicity of the Tyrrhenian Sea (Anderson, H., Jackson, J.), **91**, 613
Simulation of earthquake sequences (Chen, Y.T., Knopoff, L.), **91**, 693

Earth's core

The Earth's C_{21} and S_{21} gravity coefficients and the rotation of the core (Wahr, J.M.), **88**, 265
Limits on lateral density and velocity variations in the Earth's outer core (Stevenson, D.J.), **88**, 311
Internal waves in a rotating stratified spherical shell: asymptotic solutions (Friedlander, S.), **89**, 637

Earth's crust

Long-range propagation of short-period transversal and longitudinal seismic waves in the Baikal zone (Soloviev, S.L., Bukina, K.I., Kovachev, S.A., Villemson, L.Kh.), **88**, 125
Crustal structure in the Society and Tuamotu Islands, French Polynesia (Talandier, J., Okal, E.A.), **88**, 499
Single-station attenuation measurements of high-frequency Rayleigh waves in Scotland (MacBeth, C.D., Burton, P.W.), **89**, 757
Extensive-dilatancy anisotropy (EDA) inferred from observations of crustal shear waves generated by a refraction experiment in northern Scandinavia, (Brooks, S.G., Chroston, P.N., Booth, D.C.), **90**, 225
Shear velocity structure of Jordan from explosion seismic data (El-Isa, Z., Mechie, J., Prodehl, C.), **90**, 265
Mechanism of formation of fold belts and associated seismic anisotropy (Artyushkov, E.V.), **91**, 449

Earth's lithosphere

Extremal bounds on geotherms in eroding mountain belts from metamorphic pressure-temperature conditions (McNutt, M., Royden, L.), **88**, 81
Amplitude and phase data inversions for phase velocity anomalies in the Pacific Ocean basin (Yomogida, K., Aki, K.), **88**, 161
Axisymmetric finite element analysis of an elastic lithosphere subjected to thermal loading (McMullen Jr., R.J., Mohraz, B.), **88**, 325
Seismic reflections from the Moho - the effect of isostasy (Warner, M.R.), **88**, 425
Large variation of Curie depth and lithospheric thickness beneath the Indian subcontinent and a case for magnetothermometry (Negi, J.G., Agrawal, P.K., Pandey, O.P.), **88**, 763

Earth's mantle

Shear-wave splitting in the upper-mantle wedge above the Tonga subduction zone (Bowman, J.R., Ando, M.), **88**, 25
Elastic wave anisotropy in the upper mantle (Sayers, C.M.), **88**, 417
On the electrical conductivity of the mid-mantle – I. Calculation of equivalent scalar magnetotelluric response funtions (Schultz, A., Larsen, J.C.), **88**, 733
The three-dimensional shear wave structure in the mantle by overtone waveform inversion – I. Radial seismogram inversion (Tanimoto, T.), **89**, 713
An analytic model for a mantle plume fed by a boundary layer (Sleep, N.H.), **90**, 119
Asymptotic coupled-mode expressions for multiplet amplitude anomalies and frequency shifts on an aspherical earth (Park, J.), **90**, 129
Mechanism of formation of fold belts and associated seismic anisotropy (Artyushkov, E.V.,), **91**, 449

Earth's rotation

Changes in the Earth's rotation and low-degree gravitational field induced by earthquakes (Chao, B.F., Gross, R.S.), **91**, 569

Elastic wave theory

Reduction of deep layers in surface wave computation (Bhattacharya, S.N.), **88**, 97
Catastrophe theory, caustics and traveltime diagrams in seismology (Brown, M.G., Tappert, F.D.), **88**, 217
Computation of wavefields in vertically inhomogeneous media by a frequency domain finite-difference method and application to wave propagation in earth models with random velocity and density perturbations (Kom, M.), **88**, 345
A simple exact method for Green's functions for *SH* motion in a layered elastic medium using leaking modes (Haddon, R.A.W.), **88**, 379
Three-dimensional seismic inversion of velocity- and density-dependent reflectivity (Norton, S.J.), **88**, 393
Recovery of the elastic parameters of a layered half-space (Sacks, P., Symes, W.), **88**, 593
Synthetic seismograms using multifold path integrals – I. Theory (Frazer, L.N.), **88**, 621
Synthetic seismograms using multifold path integrals – II. Computations (Sen, M.K., Frazer, L.N.), **88**, 647
Broad-band synthetic seismograms for a spherical inhomogeneity in a many-layered elastic half-space (Boström, A., Karlsson, A.), **89**, 527
Some remarks on the Gaussian beam summation method (White, B.S., Norris, A., Bayliss, A., Burridge, R.), **89**, 579
2-D reflectivity method and synthetic seismograms for irregularly layered structures – I. *SH*-wave generation (Kohketsu, K.), **89**, 821
Seismic rays in an ellipsoidal earth model: theoretical analysis and estimation of deviations due to the ellipticity (Guéguen, J.-F., Hoang-Trong, P., Legros, H.), **89**, 839
Spectral aspects of the Gaussian beam method: reflection from a homogeneous half-space (Lu, I.T., Felsen, L.B., Ruan, Y.Z.), **89**, 915
Stochastic dispersion of short-period *P*-waves due to scattering and multipathing (McLaughlin, K.L., Anderson, L.M.), **89**, 933
A method of obtaining a velocity-depth envelope from wide-angle seismic data (Mithal, R., Diebold, J.B.), **89**, 965
Rigorous velocity bounds from soft $\tau(p)$ and $X(p)$ data (Stark, P.B.) **89**, 987
Smooth profiles from $\tau(p)$ and $X(p)$ data (Stark, P.B., Parker, R.L.), **89**, 997
Point sources of elastic deformation: elementary sources, dynamic displacements (Kagan, Y.Y.), **91**, 891

Elasticity

Point sources of elastic deformation: elementary sources, static displacements (Kagan, Y.Y.), **90**, 1
Radiation from an impulsive line source in an unbounded homogeneous anisotropic medium (van der Hijden, J.H.M.T.), **91**, 355
Determination of elastic parameters of transversely isotropic media by seismic techniques (Lyakhovitskiy, F.M.), **91**, 439
Physical principles and instruments for the acoustic polarization method of determining elastic anisotropy in rock samples (Gorbatsevich, F.F.), **91**, 493
Measuring anisotropy in rocks using laser-generated ultrasound (Young, R.P., Hutchins, D.A.), **91**, 501

Elastodynamics

Seismic waves in stratified anisotropic media – II. Elastodynamic eigensolutions for some anisotropic systems (Fryer, G.J., Frazer, L.N.), **91**, 73

Electrical anisotropy

On the connection between the critical value of the "vertical" electrical anisotropy and earthquake prediction (Luboshits, V.M.), **91**, 349

Electrical conductivity

Riccati inversion of magnetotelluric data (Srnka, L.J., Crutchfield II, W.Y.), **91**, 211

Electromagnetic induction

Direct observation of channelling of induced

currents (Boteler, D.H., Kaiser, A.B., Ingham, M.R.), **88**, 529
On the Frechét differentiability of the one-dimensional electromagnetic induction problem (MacBain, J.), **88**, 777
A simple function for mapping induced currents (Beamish, D.), **90**, 445

Electromagnetic sounding

Interpretation of transient electromagnetic soundings over three-dimensional structures for the central-loop configuration (Newman, G.A., Anderson, W.L., Hohmann, G.W.), **89**, 889

Eruption mechanics

Formation and mechanics of magma reservoirs in Iceland (Gudmundsson, A.), **91**, 27

Europe

Palaeomagnetism and isotopic age data fron Upper Cretaceous igneous rocks of W. Portugal; geological correlation and plate tectonic aspects (Storetvedt, K.M., Mogstad, H., Abranches, M.C., Mitchell, J.G., Serralheiro, A.), **88**, 241
Single-station attenuation measurements of high-frequency Rayleigh waves in Scotland (MacBeth, C.D., Burton, P.W.), **89**, 757
Formation and mechanics of magma reservoirs in Iceland (Gudmundsson, A.), **91**, 27
Lateral heterogeneity of Europe's upper mantle as inferred from modelling of broad-band body waves, (Paulssen, H.), **91**, 171
Conductivity anomalies in the Baltic Shield in Finland (Pajunpää, K.), **91**, 657
Stacking gravity tide observations in central Europe for the retrieval of the complex eigenfrequency of the nearly diumal free-wobble (Neuberg, J., Hinderer, J., Zürn, W.), **91**, 853
Active tectonics of the Adriatic Region (Anderson, H., Jackson, J.), **91**, 939

Fault creep

A crack model of creep processes on deep-fault sections (Bonafede, M., Dragoni, M.), **91**, 1061

Fault-plane solutions

The deep seismicity of the Tyrrhenian Sea (Anderson, H., Jackson, J.), **91**, 613

Fault zones

Observation and modelling of fault-zone fracture seismic anisotropy – I. *P*, *SV* and *SH* travel times (Leary, P.C., Li, Y.-G., Aki, K.), **91**, 461
Observation and modelling of fault-zone fracture seismic anisotropy – II. *P*-wave polarization anomalies (Li, Y.-G., Leary, P.C., Aki, K.), **91**, 485

Fennoscandia

Magnetotellurics along the Fennoscandian Long Range profile (Rasmussen, T.M., Roberts, R.G., Pedersen, L.B.), **89**, 799

Fold belts

Pre- and post-folding magnetizations from the early Devonian Snowy River Volcanics and Buchan Caves Limestone, Victoria (Schmidt, P.W., Embleton, B.J.J., Palmer, H.C.), **91**, 155

Fractals

Fractal structure of spatial distribution of microfracturing in rock (Hirata, T., Satoh, T., Ito, K.), **90**, 369

Fracturing

On the relation between seismic wave velocity and stress in a solid (Lyakhousky, V.A., Myasnikov, V.P.), **91**, 429

Free oscillations

Local eigenfrequency and its uncertainty inferred from fundamental spheroidal mode frequency shifts (Davis, J.P.), **88**, 693
Multiple-taper spectral analysis of terrestrial free oscillations: part I (Park, J., Lindberg, C.R., Thomson, D.J.), **91**, 755
Multiple-taper spectral analysis of terrestrial free oscillations: part II (Lindberg, C.R., Park, J.), **91**, 795

Geoid

Precise location of unsurveyed seamounts in the Austral archipelago area using SEASAT data (Baudry, N., Diament, M., Albouy, Y.), **89**, 359

Geological rhythms

Global volcanism, biological mass extinctions and the galactic vertical motion of the solar system (Pandey, O.P., Negi, J.G.), **89**, 857

Geomagnetic deep sounding

Models of conductive structure under the Canadian

Cordillera (Ingham, M.R., Gough, D.I., Parkinson, W.D.), **88**, 477

Geomagnetic reversals

Equation for the field lines of an axisymmetric magnetic multipole (Willis, D.M., Young, L.R.), **89**, 1011

Geomagnetic secular variations

A 5000 year geomagnetic palaeosecular variation record from western Canada (Turner, G.M.), **91**, 103

Geomagnetic variations

Currents associated with abnormal quiet days in Sq(H) (Butcher, E.C.), **88**, 111
Lunar and solar daily variations of equivalent slab thickness at Delhi (Bhuyan, P.K., Tyagi, T.R.), **88**, 487

Geomagnetism

Dynamo waves and palaeomagnetic secular variation (Olson, P., Hagee, V.L.), **88**, 139
The region on the core-mantle boundary where a geostrophic velocity field can be determined from frozen-flux magnetic data (Backus, G.E., Le Mouël, J.L.), **88**, 321
The lunar geomagnetic tide at night (Stening, R.J., Winch, D.E.), **88**, 461

Geophysical modelling

On the evaluation of geophysical models (Guttorp, P., Walden, A.), **91**, 201

Geothermics

Extremal bounds on geotherms in eroding mountain belts from metamorphic pressure-temperature conditions (McNutt, M., Royden, L.), **88**, 81
Large variation of Curie depth and lithospheric thickness beneath the Indian subcontinent and a case for magnetothermometry (Negi, J.G., Agrawal, P.K., Pandey, O.P.), **88**, 763
Magnetotelluric soundings in the Canadian Rocky Mountains (Hutton, V.R.S., Gough, D.I., Dawes, G.J.K., Travassos, J.), **90**, 245

Glacial rebound

Glacial rebound and relative sea-level variations: a new appraisal (Nakada, M., Lambeck, K.), **90**, 171

Gravity

Dynamic topography and gravity anomalies for fluid layers whose viscosity varies exponentially with depth (Revenaugh, J., Parsons, B.), **90**, 349
Mechanisms of isostatic compensation in the vicinity of the East African Rift, Kenya, (Bechtel, T.D., Forsyth, D.W., Swain, C.J.), **90**, 455

Gravity Field

The Earth's C_{21} and S_{21} gravity coefficients and the rotation of the core (Wahr, J.M.), **88**, 265
Changes in the Earth's rotation and low-degree gravitational field induced by earthquakes (Chao, B.F., Gross, R.S.), **91**, 569
Analysis of gravity fields in the north-western Himalayas and Kohistan region using deep seismic sounding data (Verma, R.K., Prasad, K.A.V.L.), **91**, 869

Gravity methods

An intercomparison of LaCoste and Romberg Model-D gravimeters: results of the International D-meter Campaign 1983 (Becker, M., Groten, E., Lambert, A., Nakai, S.), **89**, 419
The correspondence between gravitational attraction and surface displacement due to volume expansion (Vasco, D.W., Johnson, L.R.), **89**, 749

Green's functions

Green functions and associated sources in infinite and stratified poroelastic media (Boutin, C., Bonnet, G., Bard, P.Y.), **90**, 521
Determination of focal mechanism solutions for four earthquakes from Monticello, South Carolina, and crustal structure by waveform modelling (Saikia, C.K., Herrmann, R.B.), **90**, 669

Heat flow

Bounds on properties of continental crustal heat productions (Huestis, S.P.), **90**, 327

Heat flux

An improved method of Nusselt number calculation (Ho-Liu, P., Hager, B.H., Raefsky, A.), **88**, 205

Himalayas

Analysis of gravity fields in the north-western Himalayas and Kohistan region using deep seismic sounding data (Verma, R.K., Prasad, K.A.V.L.), **91**, 869

Hotspots

Lithospheric heating by mantle plumes (Sleep, N.H.), **91**, 1

Impact cratering

Global volcanism, biological mass extinctions and the galactic vertical motion of the solar system (Pandey, O.P., Negi, J.G.), **89**, 857

India

Lunar and solar daily variations of equivalent slab thickness at Delhi (Bhuyan, P.K., Tyagi, T.R.), **88**, 487

Large variation of Curie depth and lithospheric thickness beneath the Indian subcontinent and a case for magnetothermometry (Negi, J.G., Agrawal, P.K., Pandey, O.P.), **88**, 763

Instrumentation

Interfacing the DIGICO flux-gate spinner magnetometer to an APPLE IIe microcomputer (Tucholka, P., Tessier, J.), **89**, 705

Physical principles and instruments for the acoustic polarization method of determining elastic anisotropy in rock samples (Gorbatsevich, F.F.), **91**, 493

Measuring anisotropy in rocks using laser-generated ultrasound (Young, R.P., Hutchins, D.A.), **91**, 501

Inverse theory

A method of obtaining a velocity-depth envelope from wide-angle seismic data (Mithal, R., Diebold, J.B.), **89**, 965

Rigorous velocity bounds from soft $\tau(p)$ and $X(p)$ data (Stark, P.B.) **89**, 987

Smooth profiles from $\tau(p)$ and $X(p)$ data (Stark, P.B., Parker, R.L.), **89**, 997

Applications of seismic travel-time tomography (Bording, R.P., Gersztenkorn, A., Lines, L.R., Scales, J.A., Treitel, S.), **90**, 285

Construction of non-negative resolving kernels in Backus–Gilbert theory (Huestis, S.P.), **90**, 495

Inversion

On the Frechét differentiability of the one-dimensional electromagnetic induction problem (MacBain, J.), **88**, 777

Italy

The Campania, southern Italy, earthquakes of 1962 August 21 (Westaway, R.), **88**, 1

The earthquake of 1980 November 23 in Campania-Basilicata (southern Italy) (Westaway, R., Jackson, J.), **90**, 375

Jordan

Shear velocity structure of Jordan from explosion seismic data (El-Isa, Z., Mechie, J., Prodehl, C.), **90**, 265

Kenya

Mechanisms of isostatic compensation in the vicinity of the East African Rift, Kenya (Bechtel, T.D., Forsyth, D.W., Swain, C.J.), **90**, 455

Laboratory methods

Physical principles and instruments for the acoustic polarization method of determining elastic anisotropy in rock samples (Gorbatsevich, F.F.), **91**, 493

Measuring anisotropy in rocks using laser-generated ultrasound (Young, R.P., Hutchins, D.A.), **91**, 501

Lateral heterogeneity

Lateral heterogeneity of Europes upper mantle as inferred from modelling of broad-band body waves, (Paulssen, H.), **91**, 171

Multiplet coupling and the calculation of synthetic long-period seismograms (Dahlen, F.A.), **91**, 241

On the use of truncated modal expansions in laterally varying media (Maupin, V., Kennett, B.L.N.), **91**, 837

Lithosphere

Analysis of the cooling of a variable viscosity fluid with applications to the Earth (Buck, W.R.), **89**, 549

Lithospheric heating by mantle plumes (Sleep, N.H.), **91**, 1

Magma reservoirs

Formation and mechanics of magma reservoirs in Iceland (Gudmundsson, A.), **91**, 27

Magnetotellurics

A stable finite element solution for two-dimensional magnetotelluric modelling (Wannamaker, P.E., Stodt, J.A., Rijo, L.), **88**, 277

On the electrical conductivity of the mid-mantle – I. Calculation of equivalent scalar

magnetotelluric response funtions (Schultz, A., Larsen, J.C.), **88**, 733
Magnetotellurics along the Fennoscandian Long Range profile (Rasmussen, T.M., Roberts, R.G., Pedersen, L.B.), **89**, 799
The influence of surface inhomogeneities on deep electromagnetic soundings of the Earth (Fainberg, E.B., Singer, B.Sh.), **90**, 61
Magnetotelluric soundings in the Canadian Rocky Mountains (Hutton, V.R.S., Gough, D.I., Dawes, G.J.K., Travassos, J.), **90**, 245
A magnetotelluric traverse across the Mauritanides orogenic belt (West Africa) (Ritz, M., Vassal, J.), **91**, 43
Riccati inversion of magnetotelluric data (Srnka, L.J., Crutchfield II, W.Y.), **91**, 211

Mantle

Lateral heterogeneity of Europes upper mantle as inferred from modelling of broad-band body waves (Paulssen, H.), **91**, 171
Some geodynamical effects of anisotropic viscosity (Christensen, U.R.), **91**, 711
Regional 3-D heterogeneities by waveform inversion – application to the Atlantic area (Honda, S., Tanimoto, T.), **91**, 737
Crustal and upper mantle structure of the northwestern North Island, New Zealand from seismic refraction data (Stern, T., Smith, E.G.C., Davey, F.J., Muirhead, K.J.), **91**, 915

Mechanical properties

Shock-induced temperatures of MgO (Svendsen, B., Ahrens, T.J.), **91**, 667

Microfracturing

Fractal structure of spatial distribution of microfracturing in rock (Hirata, T., Satoh, T., Ito, K.), **90**, 369

Normal faulting

Kinematic source modelling of normal faulting earthquakes using the finite element method (Benz, H.M., Smith, R.B.), **90**, 305
The earthquake of 1980 November 23 in Campania-Basilicata (southern Italy) (Westaway, R., Jackson, J.), **90**, 375

Normal modes of the Earth

Multiplet–multiplet coupling due to lateral heterogeneity: asymptotic effects on the amplitude and frequency of the Earth's normal modes (Romanowicz, B.), **90**, 75
Asymptotic coupled-mode expressions for multiplet amplitude anomalies and frequency shifts on an aspherical earth (Park, J.), **90**, 129

North Greenland

Palaeomagnetism of middle Proterozoic (c. 1.25 Ga) dykes from central North Greenland (Abrahamsen, N., Van der Voo, R.), **91**, 597

Oceanography

Ocean bottom friction coefficient from SEASAT –ALT data (Hudson Bay) (Moon, W., Tang, R.), **88**, 535

Orogenic belt

A magnetotelluric traverse across the Mauritanides orogenic belt (West Africa) (Ritz, M., Vassal, J.), **91**, 43

Pacific Ocean

Amplitude and phase data inversions for phase velocity anomalies in the Pacific Ocean basin (Yomogida, K., Aki, K.), **88**, 161
Crustal structure in the Society and Tuamotu Islands, French Polynesia (Talandier, J., Okal, E.A.), **88**, 499
Direct observation of channelling of induced currents (Boteler, D.H., Kaiser, A.B., Ingham, M.R.), **88**, 529

Palaeomagnetic secular variations

Dynamo waves and palaeomagnetic secular variation (Olson, P., Hagee, V.L.), **88**, 139

Palaeomagnetism

Palaeomagnetism and isotopic age data from Upper Cretaceous igneous rocks of W. Portugal; geological correlation and plate tectonic aspects (Storetvedt, K.M., Mogstad, H., Abranches, M.C., Mitchell, J.G., Serralheiro, A.), **88**, 241
Compaction-induced inclination shallowing of the post-depositional remanent magnetization in a synthetic sediment (Anson, G.L., Kodama, K.P.), **88**, 673
Interfacing the DIGICO flux-gate spinner magnetometer to an APPLE IIe microcomputer (Tucholka, P., Tessier, J.), **89**, 705
Palaeointensity in the pelagic realm: marine sediment data compared with archaeomagnetic and lake sediment records (Constable, C.G., Tauxe, L.), **90**, 43
Self-reversal of chemical remanent magnetization: a palaeomagnetic example (McClelland, E.), **90**, 615

A palaeomagnetic study of some Pleistocene sediments in northern Canada and its bearing on the secular variation of the geomagnetic field (Hedlin, M.A.H., Evans, M.E.), **90**, 693
Palaeomagnetism and mid-Palaeozoic ring complexes in Niger, West Africa, and tectonic implications (Hargraves, R.B., Dawson, E.M., Van Houten, F.B.) **90**, 705
A 5000 year geomagnetic palaeosecular variation record from western Canada (Turner, G.M.), **91**, 103
Variations of the relative palaeointensity of the geomagnetic field in westem Europe in the interval 25–10 kyr BP as deduced from analyses of lake sediments (Thouveny, N.), **91**, 123
Pre- and post-folding magnetizations from the early Devonian Snowy River Volcanics and Buchan Caves Limestone, Victoria (Schmidt, P.W., Embleton, B.J.J., Palmer, H.C.), **91**, 155
Palaeomagnetism of middle Proterozoic (c. 1.25 Ga) dykes from central North Greenland (Abrahamsen, N., Van der Voo, R.), **91**, 597
TRM deviations in anisotropic assemblages of multidomain magnetite (Cogné, J.P.), **91**, 1015
Tectonic rotations and translations in western Canada; new evidence from Jurassic rocks of Vancouver Island (Irving, E., Yole, R.W.), **91**, 1027
Apparent polar wander of the mean-lithosphere reference frame (Gordon, R.G., Livermore, R.A.), **91**, 1051

PDRM

Compaction-induced inclination shallowing of the post-depositional remanent magnetization in a synthetic sediment (Anson, G.L., Kodama, K.P.), **88**, 673

Peru

The Ancash, Peru, earthquake of 1946 November 10: evidence for low-angle normal faulting in the high Andes of northern Peru (Doser, D.I.), **91**, 57

Plate tectonics

Analysis of gravity fields in the north-western Himalayas and Kohistan region using deep seismic sounding data (Verma, R.K., Prasad, K.A.V.L.,), **91**, 869
Active tectonics of the Adriatic Region (Anderson, H., Jackson, J.), **91**, 939
Apparent polar wander of the mean-lithosphere reference frame (Gordon, R.G., Livermore, R.A.), **91**, 1051

Point source response

Point sources of elastic deformation: elementary sources, dynamic displacements (Kagan, Y.Y.), **91**, 891

Ray tracing

Ray tracing of body waves in an anisotropic medium (Mochizuki, E.), **90**, 627
Effects of off great-circle propagation on the phase of long-period surface waves (Schwartz, S.Y., Lay, T.), **91**, 143
Computation of high-frequency seismic wavefields in 3-D laterally inhomogeneous anisotropic media (Gajewski, D., Pšenčík, I.), **91**, 383

Rayleigh waves

Single-station attenuation measurements of high-frequency Rayleigh waves in Scotland (MacBeth, C.D., Burton, P.W.), **89**, 757

Refraction seismology

Crustal structure in the Society and Tuamotu Islands, French Polynesia (Talandier, J., Okal, E.A.), **88**, 499

Resistivity

On the connection between the critical value of the 'vertical' electrical anisotropy and earthquake prediction (Luboshits, V.M.), **91**, 349

Rheology

Analysis of the cooling of a variable viscosity fluid with applications to the Earth (Buck, W.R.), **89**, 549

Rock magnetism

The rapid determination of rotational remanent magnetization and the effective field which produces it (Stephenson, A., Molyneux, L.) **90**, 477
Self-reversal of chemical remanent magnetization: a palaeomagnetic example (McClelland, E.), **90**, 615

Satellite geodesy

On differential scale changes and the satellite Doppler system z-shift (Soler, T., van Gelder, B.H.W.), **91**, 639

SEASAT

Ocean bottom friction coefficient from SEASAT–ALT data (Hudson Bay) (Moon, W., Tang, R.), **88**, 535
Precise location of unsurveyed seamounts in the Austral archipelago area using SEASAT data (Baudry, N., Diament, M., Albouy, Y.), **89**, 359

Seismic anisotropy

Elastic wave anisotropy in the upper mantle (Sayers, C.M.), **88**, 417
Extensive-dilatancy anisotropy (EDA) inferred from observations of crustal shear waves generated by a refraction experiment in northern Scandinavia (Brooks, S.G., Chroston, P.N., Booth, D.C.), **90**, 225

Seismic arrays

Stochastic dispersion of short-period *P*-waves due to scattering and multipathing (McLaughlin, K.L., Anderson, L.M.), **89**, 933

Seismic attenuation

Temporal variation of body-wave attenuation using earthquake doublets (Frémont, M.J., Poupinet, G.), **90**, 503

Seismic inversion

Three-dimensional seismic inversion of velocity- and density-dependent reflectivity (Norton, S.J.), **88**, 393

Seismic reflection profiling

Seismic reflections from the Moho – the effect of isostasy (Warner, M.R.), **88**, 425

Seismic source theory

Point sources of elastic deformation: elementary sources, dynamic displacements (Kagan, Y.Y.), **91**, 891
Station threshold bias in short-period amplitude distance and station terms used to compute body-wave magnitudes m_b (Lilwall, R.C.), **91**, 1129

Seismic stress

A crack model of creep processes on deep-fault sections (Bonafede, M., Dragoni, M.), **91**, 1061

Seismic surface waves

Reduction of deep layers in surface wave computation (Bhattacharya, S.N.), **88**, 97
Amplitude and phase data inversions for phase velocity anomalies in the Pacific Ocean basin (Yomogida, K., Aki, K.), **88**, 161
Surface-wave tracing equations and Fermat's principle in an anisotropic earth (Tanimoto, T.), **88**, 231
Gaussian beams for surface waves in transversely isotropic media (Yomogida, K.), **88**, 297

Seismic tomography

Applications of seismic travel-time tomography (Bording, R.P., Gersztenkorn, A., Lines, L.R., Scales, J.A., Treitel, S.), **90**, 285

Seismic velocity

2-D and 3-D velocity patterns in southeastern Europe, Asia Minor and the eastern Mediterranean from seismological data (Gobarenko, V.S., Nikolova, S.B., Yanovskaya, T.B.), **90**, 483
Shear velocities, Q_β, and the frequency dependence of Q_β in stable and tectonically active regions from surface wave observations (Hwang, H., Mitch B.J.), **90**, 575
Estimation of shear-velocity profiles by imaging of surface waves (Lee, H., McMechan, G.A.), **90**, 649
Determination of focal mechanism solutions for four earthquakes from Monticello, South Carolina, and crustal structure by waveform modelling (Saikia, C.K., Herrmann, R.B.), **90**, 669
Seismic structure of a seaward-dipping reflector sequence southwest of Rockall Plateau (Whitmarsh, R.B., Miles, P.R.), **90**, 731
Temporal variations of *P*-wave velocity–anisotropy near a tectonic fault (Silaeva, O.I., Zamakhaev, A.M.), **91**, 535

Seismicity

The deep seismicity of the Tyrrhenian Sea (Anderson, H., Jackson, J.), **91**, 613
Simulation of earthquake sequences (Chen, Y.T., Knopoff, L.), **91**, 693
Active tectonics of the Adriatic Region (Anderson, H., Jackson, J.), **91**, 939

Seismology

On regional differences in seismology (Jeffreys, H., Shimshoni, M.), **88**, 305
Shear velocity structure of Jordan from explosion seismic data (El-Isa, Z., Mechie, J., Prodehl, C.), **90**, 265
Ray tracing of body waves in an anisotropic medium (Mochizuki, E.), **90**, 627
Proceedings of the Second International Workshop on Seismic Anisotropy (Booth, D.C., Crampin, S., Chesnokov, E.M.), **91**, 261
The Turkish Dilatancy Project (TDP3): multidisciplinary studies of a potential earthquake source region (Evans, R., Beamish, D., Crampin, S., Ücer, S.B.), **91**, 265
Shear-wave polarizations near the North Anatolian Fault – III. Observations of temporal changes (Chen, T.-C., Booth, D.C., Crampin, S.), **91**, 287
Microearthquakes in the TDP swarm, Turkey: clustering in space and time (Lovell, J., Crampin, S., Evans, R., Ücer, S.B.), **91**, 313

The basis for earthquake prediction (Crampin, S.), **91**, 331
Double Contour Integration for Transmissions from Point Sources through Anisotropic Layers as used in ROCPAC software (Taylor, D.B.),**91**, 373
Computation of high-frequency seismic wavefields in 3-D laterally inhomogeneous anisotropic media (Gajewski, D., Pšenčik, I.), **91**, 383
Radiation from an impulsive line source in an unbounded homogeneous anisotropic medium (van der Hijden, J.H.M.T.), **91**, 355
Plane wave propagation in nonlinear-elastic anisotropic media (Tsvankin, I.D., Chesnokov, E.M.), **91**, 413
On the relation between seismic wave velocity and stress in a solid (Lyakhousky, V.A., Myasnikov, V.P.), **91**, 429
Determination of elastic parameters of transversely isotropic media by seismic techniques (Lyakhovitskiy, F.M.), **91**, 439
Mechanism of formation of fold belts and associated seismic anisotropy (Artyushkov, E.V.), **91**, 449
Observation and modelling of fault-zone fracture seismic anisotropy – I. *P*, *SV* and *SH* travel times (Leary, P.C., Li, Y.-G., Aki, K.), **91**, 461
Observation and modelling of fault-zone fracture seismic anisotropy – II. *P*-wave polarization anomalies (Li, Y.-G., Leary, P.C., Aki, K.), **91**, 485
Experimental study of shear-waves from shots in anisotropic media (Galperina, R.M., Galperin, E.I.), **91**, 517
Temporal variations of *P*-wave velocity–anisotropy near a tectonic fault (Silaeva, O.I., Zamakhaev, A.M.), **91**, 535
Investigation of 3D wavefields of reflected shear-waves and converted waves: mathematical modelling and reflection data processing (Obolentseva, I.R., Grechka, V.Yu., Nickolsky, A.A.), **91**, 543
Regional 3-D heterogeneities by waveform inversion – application to the Atlantic area (Honda, S., Tanimoto, T.), **91**, 737
On the use of truncated modal expansions in laterally varying media (Maupin, V., Kennett, B.L.N.), **91**, 837
Crustal and upper mantle structure of the northwestern North Island, New Zealand from seismic refraction data (Stern, T., Smith, E.G.C., Davey, F.J., Muirhead, K.J.), **91**, 915
Real and complex spectra – a generalization of WKBJ seismograms (Heyman, E., Felsen, L.B.), **91**, 1089

S.E. Europe, Asia Minor & eastern Mediterranean

2-D and 3-D velocity patterns in southeastern Europe, Asia Minor and the eastern Mediterranean from seismological data (Gobarenko, V.S., Nikolova, S.B., Yanovskaya, T.B.), **90**, 483

Shear-Waves

Shear-wave polarizations near the North Anatolian Fault – III. Observations of temporal changes (Chen, T.-C., Booth, D.C., Crampin, S.),**91**, 287
The basis for earthquake prediction (Crampin, S.), **91**, 331
Plane wave propagation in nonlinear–elastic anisotropic media (Tsvankin, I.D., Chesnokov, E.M.), **91**, 413
Measuring anisotropy in rocks using laser-generated ultrasound (Young, R.P., Hutchins, D.A.), **91**, 501
Experimental study of shear-waves from shots in anisotropic media (Galperina, R.M., Galperin, E.I.), **91**, 517

Shock compression

Shock-induced temperatures of MgO (Svendsen, B., Ahrens, T.J.), **91**, 667

Solar-terrestrial physics

Equation for the field lines of an axisymmetric magnetic multipole (Willis, D.M., Young, L.R.), **89**, 1011

Spectral analysis

Multiple-taper spectral analysis of terrestrial free oscillations: part I (Park, J., Lindberg, C.R., Thomson, D.J.), **91**, 755
Multiple-taper spectral analysis of terrestrial free oscillations: part II (Lindberg, C.R., Park, J.), **91**, 795

StRM

Variations of the relative palaeointensity of the geomagnetic field in western Europe in the interval 25–10 kyr BP as deduced from analyses of lake sediments (Thouveny, N.), **91**, 123

Subduction

Shear-wave splitting in the upper-mantle wedge above the Tonga subduction zone (Bowman, J.R., Ando, M.), **88**, 25

Surface waves

2-D and 3-D velocity patterns in southeastern Europe, Asia Minor and the eastern Mediterranean from seismological data (Gobarenko, V.S., Nikolova, S.B., Yanovskaya, T.B.), **90**, 483
Shear velocities, Q_β, and the frequency dependence of Q_β in stable and tectonically active regions

from surface wave observations (Hwang, H., Mitchell, B.J.), **90**, 575
Estimation of shear-velocity profiles by imaging of surface waves (Lee, H., McMechan, G.A.), **90**, 649
Effects of off great-circle propagation on the phase of long-period surface waves (Schwartz, S.Y., Lay, T.), **91**, 143
On the use of truncated modal expansions in laterally varying media (Maupin, V., Kennett, B.L.N.), **91**, 837

Synthetic seismograms

High-frequency radiation from earthquake sources in laterally varying layered structures (Červený, V., Pleinerová, J., Klimeš, L., Pšenčík, I.), **88**, 43
Computation of wavefields in vertically inhomogeneous media by a frequency domain finite-difference method and application to wave propagation in earth models with random velocity and density perturbations (Korn, M.), **88**, 345
A simple exact method for Green's functions for *SH* motion in a layered elastic medium using leaking modes (Haddon, R.A.W.), **88**, 379
Broad-band synthetic seismograms for a spherical inhomogeneity in a many-layered elastic half-space (Boström, A., Karlsson, A.), **89**, 527
2-D reflectivity method and synthetic seismograms for irregularly layered structures – I. *SH*-wave generation (Kohketsu, K.), **89**, 821
Kinematic source modelling of nonnal faulting earthquakes using the finite element method (Benz, H.M., Smith, R.B.), **90**, 305
Green functions and associated sources in infinite and stratified poroelastic media (Boutin, C., Bonnet, G., Bard, P.Y.), **90**, 521
Determination of focal mechanism solutions for four earthquakes from Monticello, South Carolina, and crustal structure by waveform modelling (Saikia, C.K., Herrmann, R.B.), **90**, 669
On reducing the reflectivity integral to a finite range (Chapman, C.H., Kennett, B.L.N.), **90**, 741
Seismic waves in stratified anisotropic media – II. Elastodynamic eigensolutions for some anisotropic systems (Fryer, G.J., Frazer, L.N.), **91**, 73
Multiplet coupling and the calculation of synthetic long-period seismograms (Dahlen, F.A.), **91**, 241
Double Contour Integration for Transmissions from Point Sources through Anisotropic Layers as used in ROCPAC software (Taylor, D.B.), **91**, 373
Computation of high-frequency seismic wavefields in 3-D laterally inhomogeneous anisotropic media (Gajewski, D., Pšenčík, I.), **91**, 383
Investigation of 3D wavefields of reflected shear-waves and converted waves: mathematical modelling and reflection data processing (Obolentseva, I.R., Grechka, V.Yu., Nickolsky, A.A.), **91**, 543
Real and complex spectra – a generalization of WKBJ seismograms (Heyman, E., Felsen, L.B.), **91**, 1089

Tectonics

On the relation between seismic wave velocity and stress in a solid (Lyakhousky, V.A., Myasnikov, V.P.), **91**, 429
Temporal variations of *P*-wave velocity–anisotropy near a tectonic fault (Silaeva, O.I., Zamakhaev, A.M.), **91**, 535

Terranes

Pre- and post-folding magnetizations from the early Devonian Snowy River Volcanics and Buchan Caves Limestone, Victoria (Schmidt, P.W., Embleton, B.J.J., Palmer, H.C.), **91**, 155

Time series

About a new method of spectral analysis (Anufriev, A.), **90**, 635

Tonga

Shear-wave splitting in the upper-mantle wedge above the Tonga subduction zone (Bowman, J.R., Ando, M.), **88**, 25

TRM

The effects of demagnetizing fields on thermoremanent magnetization acquired by parallel-sided baked clay blocks (Lanos, P.), **91**, 987
TRM deviations in anisotropic assemblages of multidomain magnetite (Cogne, J.P.), **91**, 1015

Turkey

The Turkish Dilatancy Project (TDP3): multidisciplinary studies of a potential earthquake source region (Evans, R., Beamish, D., Crampin, S., Ücer, S.B.), **91**, 265
Shear-wave polarizations near the North Anatolian Fault – III. Observations of temporal changes (Chen, T.-C., Booth, D.C., Crampin, S.), **91**, 287
Microearthquakes in the TDP swarm, Turkey: clustering in space and time (Lovell, J., Crampin, S., Evans, R., Ücer, S.B.), **91**, 313

USSR

Experimental study of shear-waves from shots in anisotropic media (Galperina, R.M., Galperin, E.I.), **91**, 517
Temporal variations of *P*-wave velocity–anisotropy near a tectonic fault (Silaeva, O.I., Zamakhaev, A.M.), **91**, 535

Visco-elasticity

Glacial rebound and relative sea-level variations: a new appraisal (Nakada, M., Lambeck, K.), **90**, 171

Viscosity

Dynamic topography and gravity anomalies for fluid layers whose viscosity varies exponentially with depth (Revenaugh, J., Parsons, B.), **90**, 349

Some geodynamical effects of anisotropic viscosity (Christensen, U.R.), **91**, 711

Volcanism

Explosive volcanic eruptions – VI. Ejecta dispersal in plinian eruptions: the control of eruption conditions and atmospheric properties (Wilson, L., Walker, G.P.L.), **89**, 657

Observation of tidal tilt on Kilauea Volcano, Hawaii (Davis, P.M., Rydelek, P.A., Agnew, D.C., Okamura, A.T.), **90**, 233

West Africa

Palaeomagnetism and mid-Palaeozoic ring complexes in Niger, West Africa, and tectonic implications (Hargraves, R.B., Dawson, E.M., Van Houten, F.B.), **90**, 705

A magnetotelluric traverse across the Mauritanides orogenic belt (West Africa) (Ritz, M., Vassal, J.), **91**, 43